

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11269	24221	37748	2.01	1.0E-85	AA778785.1	EST_HUMAN	Z44503.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
11342	24292	37816	2.46	1.0E-85	BF311552.1	EST_HUMAN	601897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
11342	24292	37817	2.46	1.0E-85	BF311552.1	EST_HUMAN	601897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
12064	24937	38533	2.37	1.0E-85	A1198420.1	EST_HUMAN	q156a07.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:1860468 3'
12328	25289	31780	3.47	1.0E-85	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12583	25289	31780	3.37	1.0E-85	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1426	14459		12.78	9.0E-86	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867690 5'
6249	19322	32552	1.27	8.0E-86	11424140	NT	Homo sapiens similar to CDC28 protein kinase 1 (H. sapiens) (LOC63041), mRNA
12004	24881	38477	1.57	8.0E-86	4503224	NT	Homo sapiens cytochrome P450, subfamily 11F, polypeptide 1 (CYP2F1), mRNA
936	13989	28639	0.93	7.0E-86	AA860801.1	EST_HUMAN	q188f08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1403559 3'
936	13989	28640	0.93	7.0E-86	AA860801.1	EST_HUMAN	q188f08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1403559 3'
6320	19391	32631	0.85	7.0E-86	9866886	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
6320	19391	32632	0.85	7.0E-86	9866886	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
7169	19400	31246	6.12	7.0E-86	11421737	NT	Homo sapiens Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1), mRNA
9096	22062	35487	4.12	7.0E-86	138557.1	NT	Homo sapiens galactose oxidase (GALO) gene, exon 15
10058	22985		1.49	7.0E-86	5453997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10116	23042	36522	1.67	7.0E-86	11528307	NT	Homo sapiens DiGeorge syndrome critical region gene 6 (DGCR6), mRNA
1297	14332	27293	3.29	6.0E-86	4505492	NT	Homo sapiens oxoglutarate dehydrogenase (lipoamide) (OGDH), mRNA
212	13312	26241	1.75	4.0E-86	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
8151	19226	32455	10.99	4.0E-86	BE295843.1	EST_HUMAN	601178865F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531953 5'
11572	13312	26241	2.44	4.0E-86	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
5877	18772	31944	6.64	3.0E-86	AW340946.1	EST_HUMAN	x282h12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871719 3'
8605	21573	34988	1.12	3.0E-86	AV723239	EST_HUMAN	AV723239 HTB Homo sapiens cDNA clone HTB85D04 5'
10581	23503	36995	3.26	3.0E-86	BE886479.1	EST_HUMAN	601509696F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
10581	23503	36996	3.26	3.0E-86	BE886479.1	EST_HUMAN	601509696F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
11764	23919	37437	5.6	3.0E-86	A1659240.1	EST_HUMAN	tu18b02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2251371 3'
11842	24725	38312	1.55	3.0E-86	AV690469.1	EST_HUMAN	AV690469 GKC Homo sapiens cDNA clone GKCBS02 5'
12295	25784		1.35	3.0E-86	BE410354.1	EST_HUMAN	601302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636753 5'
286	13362	26286	1.63	2.0E-86	AA306264.1	EST_HUMAN	EST177232 Jurkat T-cells VI Homo sapiens cDNA 5' end
414	13487		2.72	2.0E-86	AL163203.2	NT	Homo sapiens chromosome 21 segment H921C003
1194	14234	27189	2.88	2.0E-86	N59977.1	EST_HUMAN	y219a08.r1 Soares_multiple_sclerosis_2NbHMSF Homo sapiens cDNA clone IMAGE:283478 5'
2201	15216	28236	2.54	2.0E-86	9635487	NT	Human endogenous retrovirus, complete genome
2277	15290	28315	1.14	2.0E-86	AB033103.1	NT	Homo sapiens mRNA for KIAA1277 protein, partial cds
3426	16474	28393	1.47	2.0E-86	AW966142.1	EST_HUMAN	EST178215 IMAGE resequences, MAGI Homo sapiens cDNA

Page 401 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3759	16800	29711	2.55	2.0E-86	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3759	16800	29712	2.55	2.0E-86	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
4070	17108		3.01	2.0E-86	AW515742.1	EST_HUMAN	hd87g08.x1 NC1 CGAP_G08 Homo sapiens cDNA clone IMAGE:2916542 3'
4828	17845	30745	3.3	2.0E-86	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
5972	19057	32257	1.53	2.0E-86	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
5972	19057	32258	1.53	2.0E-86	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
7277	25672	33314	0.81	2.0E-86	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
8343	21312	34726	0.77	2.0E-86	U64744.1	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
8861	21828		0.53	2.0E-86	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
8920	21886	35312	2.44	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8920	21888	35313	2.44	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
9254	22220	35651	1.48	2.0E-86	10863876	NT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
9673	22626	36080	2.12	2.0E-86	11422084	NT	Homo sapiens chromosome segregation 1 (yeast homolog)-like (CSE1L), mRNA
10814	23735	37237	2.88	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10814	23735	37238	2.88	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10869	23789	37289	1.63	2.0E-86	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
12732	25385	31750	2.92	2.0E-86	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12901	25485		6.37	2.0E-86	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
1601	14633	27609	1.28	1.0E-86	4826855	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1) mRNA
3176	16231	28147	1.52	1.0E-86	5453949	NT	Homo sapiens fibulin 5 (FBLN5) mRNA
3249	16304	29228	2.61	1.0E-86	L20492.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
3307	16360	29279	2.18	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3307	16360	29280	2.18	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3966	17006	29921	1.01	1.0E-86	7706161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
3966	17006	29922	1.01	1.0E-86	7706161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4293	17322	30202	5.56	1.0E-86	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4651	17672	30559	1.12	1.0E-86	4507334	NT	Homo sapiens synaptobrevin 1 (SYN1), mRNA
5632	18728	31888	1.44	1.0E-86	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5430	18533		1.78	9.0E-87	AI150703.1	EST_HUMAN	qb77c09.x1 Soares_fetal_haerf_NbHH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10;

Page 402 of 546
Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7681	20639	34001	1.73	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
7681	20639	34002	1.73	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
480	13552	26480	82.98	8.0E-87	X62245.1	NT	O cuticulus mRNA for elongation factor 1 alpha
2304	15316	28336	3.11	7.0E-87	BF063211.1	EST_HUMAN	7h85f02.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
2304	15316	28337	3.11	7.0E-87	BF063211.1	EST_HUMAN	7h85f02.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
6540	19602	32864	1.01	7.0E-87	AW890336.1	EST_HUMAN	MRO-NT0039-020500-004-a11 NT0039 Homo sapiens cDNA
8531	21499	34915	2.59	7.0E-87	BF352776.1	EST_HUMAN	IL3-HT0619-060700-198-D10 HT0619 Homo sapiens cDNA
9809	21132	34535	0.66	7.0E-87	BE712981.1	EST_HUMAN	IL5-HT0702-160600-103-008 HT0702 Homo sapiens cDNA
10431	23353	36837	3.41	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_11 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
10431	23353	36838	3.41	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_11 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
10834	25703		0.48	7.0E-87	AI081565.1	EST_HUMAN	alpha5h01.s1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1680657 3'
11237	24190	37708	10.09	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
11237	24190	37709	10.09	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
3538	16584	29507	0.76	6.0E-87	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
6561	19621	32886	1.84	6.0E-87	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
11079	24041		6.13	6.0E-87	11432444	NT	Homo sapiens similar to SET translocation (myeloid leukemia-associated) (H. sapiens) (LOC83102), mRNA
1162	14204	27157	1.89	5.0E-87	AA382811.1	EST_HUMAN	EST06094 Testis 1 Homo sapiens cDNA 5' end
12585	14204	27157	2	5.0E-87	AA382811.1	EST_HUMAN	EST06094 Testis 1 Homo sapiens cDNA 5' end
967	14019	26972	0.98	4.0E-87	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1176	14217	27172	15.32	4.0E-87	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
2045	15064	28084	1.49	4.0E-87	AB007825.1	NT	Homo sapiens mRNA for KIAA0456 protein, partial cds
3478	16524	29448	1.57	4.0E-87	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
5307	18310	31167	0.98	4.0E-87	4759073	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 16 (SCYA16) mRNA
5307	18310	31168	0.98	4.0E-87	4759073	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 16 (SCYA16) mRNA
5521	18620	31554	5.85	4.0E-87	O00321	SWISSPROT	ETS-RELATED PROTEIN 71 (ETS TRANSLLOCATION VARIANT 2)
5844	18934	32118	0.55	4.0E-87	U85429.1	NT	Human transcription factor NFATx3 mRNA, complete cds
6163	19238	32469	4.54	4.0E-87	BE247284.1	EST_HUMAN	TCBAP1E4051 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4051
7933	20875	34264	0.5	4.0E-87	11425291	NT	Homo sapiens KIAA1072 protein (KIAA1072), mRNA
7933	20875	34265	0.5	4.0E-87	11425291	NT	Homo sapiens KIAA1072 protein (KIAA1072), mRNA
8050	20987	34383	0.61	4.0E-87	L48524.1	NT	Homo sapiens tuberin (TSC2) gene, exon 10
9583	22545	35996	0.47	4.0E-87	AF223470.1	NT	Homo sapiens KIAA0971-1 protein (KIAA0971-1) mRNA, complete cds

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11500	24443	37994	5.12	4.0E-87	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
12678	25839	31428	1.47	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12678	25839	31428	1.47	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12825	25444		3.11	4.0E-87	11417812	NT	Homo sapiens putative receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
2787	15779	28796	4.73	2.0E-87	4885420	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4), mRNA
2959	16017		0.79	2.0E-87	BF327920.1	EST_HUMAN	QV0-BN0148-050600-254-a03 BN0148 Homo sapiens cDNA
3798	16838	29745	0.9	2.0E-87	AU116935.1	EST_HUMAN	AU116935 HEMBA1 Homo sapiens cDNA clone HEMBA1000307 5'
4951	17966	30866	1.64	2.0E-87	BF376311.1	EST_HUMAN	CM0-TN0038-150900-662-h08 TN0038 Homo sapiens cDNA
4988	18013	30900	0.68	2.0E-87	BE175478.1	EST_HUMAN	RC5-HT0580-200300-031-G04 HT0580 Homo sapiens cDNA
5744	18838	32020	8.67	2.0E-87	BE734190.1	EST_HUMAN	601569041F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843730 5'
5744	18838	32021	8.67	2.0E-87	BE734190.1	EST_HUMAN	601569041F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843730 5'
6460	19825		3.73	2.0E-87	BE567193.1	EST_HUMAN	601341333F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:3683348 5'
6857	19910	33205	1.12	2.0E-87	N48128.1	EST_HUMAN	W21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'
6948	20172	33495	0.64	2.0E-87	AV654143.1	EST_HUMAN	AV654143 GLC Homo sapiens cDNA clone GLCDSG04 3'
7379	20349	33700	1.31	2.0E-87	BE284432.1	EST_HUMAN	601176032F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3631511 5'
7436	20403	33757	0.81	2.0E-87	11430408	NT	Homo sapiens lect domain and RLD 2 (HERC2), mRNA
7686	20644	34008	37.21	2.0E-87	N48128.1	EST_HUMAN	W21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'
7951	20892	34284	36.03	2.0E-87	N48128.1	EST_HUMAN	W21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'
8738	21706	35130	13.21	2.0E-87	X52851.1	NT	Human cyclophilin gene for cyclophilin (EO 5.2.1.8)
10144	23070		5.58	2.0E-87	BE531136.1	EST_HUMAN	601278315F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610539 5'
1186	16818		3.71	1.0E-87	7705683	NT	Homo sapiens putative glycolipid transfer protein (LOC51054), mRNA
3723	16766	29677	4.15	1.0E-87	Y00052.1	NT	Human mRNA for T-cell cyclophilin
3746	16788	29700	2.03	1.0E-87	4758827	NT	Homo sapiens neuroxin III (NRXN3), mRNA
5152	18162	31042	1.98	1.0E-87	U50949.1	NT	Rattus norvegicus taste bud receptor protein TB 641 (TB 641) gene, complete cds
6352	19421	32662	1.94	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
6352	19421	32663	1.94	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
7383	20353	33704	0.84	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7383	20353	33705	0.84	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7389	20358	33710	1.03	1.0E-87	4506786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
7928	20588	33951	1.17	1.0E-87	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7783	20736	34108	0.85	1.0E-87	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
8068	21005	34403	0.54	1.0E-87	4505526	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
8453	21422	34837	11.12	1.0E-87	AF214662.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds

Page 404 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9260	22226	35655	0.97	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2(3-sialyltransferase ST3Gal VI, complete cds
9260	22226	35656	0.97	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2(3-sialyltransferase ST3Gal VI, complete cds
9991	22918	36384	6.88	1.0E-87	BE818183.1	EST_HUMAN	RC6-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
9991	22918	36385	6.88	1.0E-87	BE818183.1	EST_HUMAN	RC6-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
10739	23661	37155	3.11	1.0E-87	M34426.1	NT	Human L-plastin mRNA, 5' end
11084	24045	37567	1.78	1.0E-87	5729867	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
12675	25978		1.46	1.0E-87	7657632	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
1108	14152	27102	6.48	9.0E-88	AF167465.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1351	14386	27355	2.56	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
1351	14386	27356	2.56	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
2130	15147	28162	1.14	9.0E-88	7661701	NT	Homo sapiens DKFZP586P1522 protein (DKFZP586P1522), mRNA
3642	16685	29801	0.98	9.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4298	17327	30207	3.27	9.0E-88	X91929.1	NT	H.sapiens ECE-1 gene (exon 9)
4298	17327	30208	3.27	9.0E-88	X91929.1	NT	H.sapiens ECE-1 gene (exon 9)
5038	18051	30931	1	9.0E-88	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
9375	22340	35771	3.69	6.0E-88	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
1845	14871		1.13	5.0E-88	7661887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
2647	15644	28669	5.45	5.0E-88	N89399.1	EST_HUMAN	K9719F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K9719 5' similar to ZINC FINGER PROTEIN HZF1
3013	16071	28991	0.81	5.0E-88	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3023	16080	29002	0.77	5.0E-88	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3023	16080	29003	0.77	5.0E-88	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3400	16449		2.75	5.0E-88	AI693217.1	EST_HUMAN	w468h08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2336799 3' similar to contains Alu repetitive element/contains element MER22 MER22 repetitive element ;
6936	20160	33481	3.32	5.0E-88	H10932.1	EST_HUMAN	ym06b10.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:47129 5'
8261	21230	34639	2.44	5.0E-88	AL163264.2	NT	Homo sapiens chromosome 21 segment HS21C084
9666	22619	36070	0.57	5.0E-88	BF680206.1	EST_HUMAN	602154958F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296775 5'
12435	14871		1.73	5.0E-88	7661887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
1332	14367	27336	1.49	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
1332	14367	27337	1.49	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
5185	18194	31069	0.81	4.0E-88	BF670714.1	EST_HUMAN	602149762F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4290975 5'
7454	20420	33775	1.35	4.0E-88	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA

Page 405 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11818	24701	38282	3.12	4.0E-88	7681947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
11818	24701	38283	3.12	4.0E-88	7681947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
733	13794	26731	0.85	3.0E-88	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
1829	14856		1.78	3.0E-88	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259), mRNA
2858	16016	28944	2.51	3.0E-88	N65951.1	EST_HUMAN	z44812.s1 Spares fetal liver spleen 1N1L S Homo sapiens cDNA clone IMAGE:295623 3'
4269	17298	30176	0.93	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4269	17298	30176	0.93	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4504	17529		3.64	3.0E-88	11429300	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
5372	18477	31350	2.45	3.0E-88	11429587	NT	Homo sapiens valosin-containing protein (VCP), mRNA
5666	18761	31930	4.05	3.0E-88	9968888	NT	Homo sapiens polycythemia rubra vera 1; cell surface receptor (PRV1), mRNA
5789	18881	32063	3.62	3.0E-88	11420697	NT	Homo sapiens v-rat simian leukemia viral oncogene homolog A (ras related) (RALA), mRNA
6285	19357	32593	0.95	3.0E-88	11417370	NT	Homo sapiens interleukin 13 (IL13), mRNA
6553	25662	32877	0.77	3.0E-88	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6553	25662	32878	0.77	3.0E-88	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7267	20002	33302	15.04	3.0E-88	AF279285.1	NT	Homo sapiens putative anion transporter 1 mRNA, complete cds
7788	20741	34114	6.35	3.0E-88	11436400	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
8253	21222	34632	10.99	3.0E-88	11421726	NT	Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA
8538	21506	34923	1.28	3.0E-88	AF034374.1	NT	Homo sapiens molybdenum cofactor biosynthesis protein A and molybdenum cofactor biosynthesis protein C mRNA, complete cds
9789	21112	34512	2.14	3.0E-88	11526262	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
10288	23213	36696	0.74	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
10288	23213	36697	0.74	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
10316	23240	36721	0.99	3.0E-88	11439065	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
12086	24958	38554	3.65	3.0E-88	4557502	NT	Homo sapiens cubilin (intrinsic factor-cobalamin receptor) (CUBN) mRNA
12421	25181	27033	7.12	3.0E-88	11417974	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1037	14083	27033	61.67	2.0E-88	7305198	NT	Homo sapiens Caldesin, presenilin-binding protein, EF hand transcription factor (CSEN), mRNA
1628	14861	27637	1.66	2.0E-88	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1765	14794	27779	4.07	2.0E-88	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4455	17481	30369	1.86	2.0E-88	5031666	NT	Homo sapiens dyx1c1, axonemal, ilgit polypeptide 4 (DNAL4), mRNA
6016	19099	32300	5.17	1.0E-88	AW139565.1	EST_HUMAN	U1-H-B11-aea-d-04-0-U1.s1 NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6016	19099	32301	5.17	1.0E-88	AW139565.1	EST_HUMAN	U1-H-B11-aea-d-04-0-U1.s1 NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6802	19856	33141	23.82	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
6802	19856	33142	23.82	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7328	20300	33644	1.29	1.0E-88	AI969034.1	EST_HUMAN	wq70a12.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:247606 3'
7390	20359	33711	3.91	1.0E-88	AA489881.1	EST_HUMAN	aa54a11.s1 NCI_CGAP_GC61 Homo sapiens cDNA clone IMAGE:824732 3' similar to WP:B0272.2
8476	21445	34882	0.47	1.0E-88	AF135183.1	NT	CE00851 ;
9597	22601	36050	1.09	1.0E-88	AA190368.1	EST_HUMAN	Homo sapiens Recq helicase 5 (RECQ5) gene, alternative splice products, complete cds
9838	22865	36327	2.73	1.0E-88	AL043314.2	EST_HUMAN	zp87c02.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:627170 5' similar to SW:POL1_HUMAN P10266 RETROVIRUS-RELATED POL POLYPYRROLINE ;
11773	23928	37449	3.86	1.0E-88	AA991479.1	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
12640	25324		1.91	1.0E-88	AL163246.2	NT	os91g03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1612756 3' similar to gb:M16342
11298	24248	37774	3.88	9.0E-89	11421238	NT	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEINS C1/C2 (HUMAN);
2745	15738	28755	1.74	8.0E-89	BE311557.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
7118	20052	33356	1.21	8.0E-89	11421514	NT	Homo sapiens transgelin 2 (TAGLN2), mRNA
433	13507	26440	1.21	7.0E-89	7657213	NT	601142409F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506186 5'
493	13507	26441	1.21	7.0E-89	7657213	NT	Homo sapiens similar to sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC33232), mRNA
4919	17836	30828	2.95	7.0E-89	4557390	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
4987	17982	30872	4.02	7.0E-89	AL045748.1	EST_HUMAN	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
5505	18605	31534	1.22	7.0E-89	X99832.1	NT	Homo sapiens complement component 8, beta polypeptide (C8B) mRNA
5505	18605	31535	1.22	7.0E-89	X99832.1	NT	DKFZp434E246_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434E246 5'
6477	19542	32789	0.77	7.0E-89	7549808	NT	H.sapiens CLN3 gene, complete CDS
6477	19542	32790	0.77	7.0E-89	7549808	NT	H.sapiens CLN3 gene, complete CDS
7741	20695	34060	1.42	7.0E-89	11420754	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
8211	21180	34589	0.57	7.0E-89	11417118	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
8211	21180	34590	0.57	7.0E-89	11417118	NT	Homo sapiens actin related protein 2/3 complex, subunit 1A (41 kD) (ARPC1A), mRNA
8823	21790	35212	3.88	7.0E-89	X62048.1	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10897	23817	37324	1.25	7.0E-89	X62048.1	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10897	23817	37325	1.25	7.0E-89	X62048.1	NT	Human 65-kilodalton phosphoprotein (p65) mRNA, complete cds
10813	23833	37347	1.11	7.0E-89	AB020630.1	NT	H.sapiens Wee1 hu gene
10913	23833	37348	1.11	7.0E-89	AB020630.1	NT	H.sapiens Wee1 hu gene
1025	14071	27022	1.23	6.0E-89	5803114	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
2223	15237	28261	1.17	6.0E-89	4506124	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
2440	15447	28464	0.99	6.0E-89	4507788	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
2440	15447	28465	0.99	6.0E-89	4507788	NT	Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4) mRNA
2440	15447	28465	0.99	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
2440	15447	28465	0.99	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA

Page 407 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4667	17688	30573	4.04	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
4667	17688	30574	4.04	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
5111	18121	30895	3.41	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
5111	18121	30996	3.41	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
7842	20789	34184	0.84	4.0E-89	BE762749.1	EST_HUMAN	QV3-NT0022-080600-219-g03 NT0022 Homo sapiens cDNA
2888	15947	28883	1.1	3.0E-89	AW976181.1	EST_HUMAN	EST388290 MAGI resequences, MAGN Homo sapiens cDNA
7347	20317	33863	1.25	3.0E-89	A1217359.1	EST_HUMAN	qh17b06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844915 3'
11151	24111	37636	1.79	3.0E-89	N57357.1	EST_HUMAN	yw86e11.1 Soares_placenta_8to9weeks_2NhrHP8to9W Homo sapiens cDNA clone IMAGE:259149 5' similar to SW:PI4K_HUMAN P42356 PHOSPHATIDYLINOSITOL 4-KINASE ALPHA;
127	13481	26416	0.68	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
127	13481	26417	0.68	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
408	13481	26416	0.64	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
408	13481	26417	0.64	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
531	13602	26520	0.93	2.0E-89	AB037783.1	NT	Homo sapiens mRNA for KIAA1342 protein, partial cds
2892	15951	28867	1.71	2.0E-89	AI222095.1	EST_HUMAN	qg96c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYLTRANSFERASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
3585	16611	29532	0.65	2.0E-89	AA759149.1	EST_HUMAN	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
3585	16611	29533	0.65	2.0E-89	AA759149.1	EST_HUMAN	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
4169	17200	30086	1.41	2.0E-89	AF089897.1	NT	Homo sapiens topoisomerase-related function protein (TRF4-2) mRNA, partial cds
4180	17211	30088	4.98	2.0E-89	X58742.1	NT	H. sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4180	17211	30099	4.98	2.0E-89	X58742.1	NT	H. sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4376	17404	30284	0.83	2.0E-89	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4524	17549	30437	1.1	2.0E-89	AJ007378.1	NT	Homo sapiens GGT gene, exon 5
5416	18519		1.39	2.0E-89	BE541744.1	EST_HUMAN	601065996F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452423 5'
5558	18655	31600	2.77	2.0E-89	AB007546.1	NT	Homo sapiens gene for LEOT2, complete cds
5886	18975	32187	1.69	2.0E-89	U03985.1	NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds
6355	19404	32644	0.87	2.0E-89	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
7931	20874	34283	4.07	2.0E-89	U81004.1	NT	Human GT24 (GT24) mRNA, partial cds
8266	21235	34646	2.9	2.0E-89	11428801	NT	Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8760	21727	35149	0.94	2.0E-89	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
9608	22612	36065	0.67	2.0E-89	AB037754.1	NT	Homo sapiens mRNA for KIAA1333 protein, partial cds
10169	23094	36572	1.11	2.0E-89	AF170814.1	NT	Homo sapiens CaBP5 (CABP5) gene, exon 5
10169	23094	36573	1.11	2.0E-89	AF170814.1	NT	Homo sapiens CaBP5 (CABP5) gene, exon 5
11701	24686	38243	2.63	2.0E-89	11434411	NT	Homo sapiens Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA
11896	24777	38363	3.64	2.0E-89	11433873	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
12026	24902	38497	1.63	2.0E-89	U10692.1	NT	Human IMAGE-7 antigen (IMAGE7) pseudogene, complete cds
11903	24784	38372	5.65	1.0E-89	BF198052.1	EST_HUMAN	h181d09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778 SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN;
11903	24784	38373	5.65	1.0E-89	BF198052.1	EST_HUMAN	h181d09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778 SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN;
8569	21537	34957	1.77	9.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8569	21537	34958	1.77	9.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1064	14110	27059	1.93	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1065	14110	27059	2.43	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1333	15864	27338	4.85	8.0E-90	BE670581.1	EST_HUMAN	7e36f08.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
1333	15864	27339	4.85	8.0E-90	BE670581.1	EST_HUMAN	7e36f08.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
8906	21872	35298	0.78	8.0E-90	BE177830.1	EST_HUMAN	RC1-HT0598-120400-022-b08 HT0598 Homo sapiens cDNA
11374	24321	37848	1.68	8.0E-90	AA705222.1	EST_HUMAN	2f82g10.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:461442 3'
11374	24321	37849	1.68	8.0E-90	AA705222.1	EST_HUMAN	2f82g10.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:461442 3'
837	13894		3.74	7.0E-90	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8767	21734		2.07	7.0E-90	AA782977.1	EST_HUMAN	al63d08.s1 Soares_testis_NHT Homo sapiens cDNA clone 1375503 3'
9317	22282	35712	1.82	7.0E-90	BE962525.2	EST_HUMAN	601655837R1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855824 3'
9317	22282	35713	1.82	7.0E-90	BE962525.2	EST_HUMAN	601655837R1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855824 3'
10495	23417	36915	2.08	7.0E-90	H68849.1	EST_HUMAN	yr86e04.s1 Soares_fetal_liver_spleen_INFLS_Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN_P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC;
10495	23417	36916	2.08	7.0E-90	H68849.1	EST_HUMAN	yr86e04.s1 Soares_fetal_liver_spleen_INFLS_Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN_P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC;
10821	23742	37243	0.58	7.0E-90	BF526039.1	EST_HUMAN	602071208F1 NCL_CGAP_Brm84 Homo sapiens cDNA clone IMAGE:4214257 5'
3081	16138	29049	0.98	6.0E-90	X91926.1	NT	H. sapiens ECE-1 gene (exon 6)
3081	16138	29050	0.98	6.0E-90	X91926.1	NT	H. sapiens ECE-1 gene (exon 6)

Page 409 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4254	17283	30184	9.77	6.0E-90	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
4254	17283	30185	9.77	6.0E-90	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
6097	19176	32393	3.07	6.0E-90	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
6097	19176	32394	3.07	6.0E-90	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
8670	21638	35061	3.16	6.0E-90	4504794	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 3 (ITPR3) mRNA
8670	21638	35062	3.16	6.0E-90	4504794	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 3 (ITPR3) mRNA
166	13259		25.61	5.0E-90	AB035344.1	NT	Homo sapiens TGL6 gene, exon 1-10b
1197	14237	27192	1.84	5.0E-90	U60226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1836	14893	27860	1.33	6.0E-90	AI222085.1	EST_HUMAN	q996c08.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb.J04131 GAMMA-GLUTAMYLTRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
1836	14863	27861	1.33	5.0E-90	AI222085.1	EST_HUMAN	q996c08.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb.J04131 GAMMA-GLUTAMYLTRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
2592	15563	28592	2.8	5.0E-90	AF114487.1	NT	Homo sapiens intersecin long isoform (ITSN) mRNA, complete cds
4571	17593	30487	1.32	5.0E-90	4506354	NT	Homo sapiens pregnancy-zone protein (PZP) mRNA
4593	17614	30508	0.7	5.0E-90	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
5872	18767	31939	2.68	5.0E-90	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
5690	18765		0.61	5.0E-90	AF008915.1	NT	Homo sapiens EVI5 homolog mRNA, complete cds
5777	18869	32052	1.34	5.0E-90	AB015817.1	NT	Homo sapiens ELKS mRNA, complete cds
5860	18767	31939	2.22	5.0E-90	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
6894	19946	33242	0.73	5.0E-90	9910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC66834), mRNA
6894	19946	33243	0.73	5.0E-90	9910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC66834), mRNA
7423	20390	33741	2.09	5.0E-90	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7423	20390	33742	2.09	5.0E-90	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7813	20762	34198	8.82	5.0E-90	4567258	NT	Homo sapiens adenylate cyclase 9 (ADCY9) mRNA
8636	21604	35028	4.98	5.0E-90	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
							Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
10039	22966	36433	1.13	5.0E-90	11419429	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10644	23566	37063	0.74	6.0E-90	AF123303.1	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10777	23698	37196	0.53	5.0E-90	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10777	23698	37197	0.53	5.0E-90	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10813	23734	37236	5.86	5.0E-90	11433721	NT	Homo sapiens ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA

Page 410 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10871	23791	37291	0.67	5.0E-90	7662051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10871	23791	37292	0.67	5.0E-90	7662051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
12872	25506		2.89	5.0E-90	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
12920	25496		4.66	5.0E-90	AI523396.1	EST_HUMAN	ai78h05.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2128761 3'
302	13366	26323	2.82	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
302	13396	26324	2.82	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
1088	14132	27084	4.74	4.0E-90	4505316	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
1698	14728	27711	8.84	4.0E-90	X99033.1	NT	H. sapiens gene encoding discoidin receptor tyrosine kinase, exon 16
4686	17707	30600	6.15	4.0E-90	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4835	17862	30751	2.4	4.0E-90	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4856	17873	30761	1.96	4.0E-90	M95967.1	NT	Human prohormone converting enzyme (NEC2) gene, exon 8
12134	25003	38610	1.75	4.0E-90	D31124.1	EST_HUMAN	HUML12582 Human fetal lung Homo sapiens cDNA 5'
8185	21155	34563	1.72	3.0E-90	BF516168.1	EST_HUMAN	UI-H-BW1-any-b-04-Q-U1.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
8185	21155	34564	1.72	3.0E-90	BF516168.1	EST_HUMAN	UI-H-BW1-any-b-04-Q-U1.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
11951	24830	38426	67.56	3.0E-90	BE563833.1	EST_HUMAN	601335244F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689147 5'
215	13315	26243	5.41	2.0E-90	BE537913.1	EST_HUMAN	601067378F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453834 5'
1177	14218	27173	46.4	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1177	14218	27174	46.4	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
3859	16898	29801	2.03	2.0E-90	AI138213.1	EST_HUMAN	qc54c02.x1 Soares_placenta_8tc9weeks_2NBHP8tc9w Homo sapiens cDNA clone IMAGE:1713410 3'
4714	17734	30627	1.17	2.0E-90	AB006627.1	NT	similar to SW:OLF3_MOUSE_P23275 OLFACTORY RECEPTOR OR3.;
4947	17963	30853	9.22	2.0E-90	5729855	NT	Homo sapiens mRNA for KIAA0289 gene, partial cds
5870	18959	32147	0.57	2.0E-90	11525901	NT	Homo sapiens GRB2-related adaptor protein (GRAP) mRNA
5870	18959	32148	0.57	2.0E-90	11525901	NT	Homo sapiens Rap2 Interacting protein 8 (RPIP8), mRNA
5879	18968	32159	4.7	2.0E-90	AW672686.1	EST_HUMAN	Homo sapiens Rap2 Interacting protein 8 (RPIP8), mRNA
10149	23075	36550	8.23	2.0E-90	11427320	NT	be49d05.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2899881 5' similar to TR:O75208 O75208 HYPOTHETICAL 35.5 KD PROTEIN.;
10149	23075	36551	8.23	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
10319	23243	36722	1.27	2.0E-90	AU118985.1	EST_HUMAN	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
10319	23243	36723	1.27	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
11798	23953	37475	5.5	2.0E-90	11024711	NT	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
							Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA

Page 411 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
278	13372	26300	3.98	1.0E-90	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
374	15812	26389	1.13	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
375	15812	26389	2.04	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
698	13758	26889	2.55	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
696	13758	26890	2.55	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
731	13792	26728	17.02	1.0E-90	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
731	13792	26729	17.02	1.0E-90	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1112	14156		2.23	1.0E-90	4507828	NT	Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA
1309	14345	27310	2.99	1.0E-90	AF096154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1309	14345	27311	2.99	1.0E-90	AF096154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1678	14708		1.76	1.0E-90	BE379884.1	EST_HUMAN	601195633F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511118 5'
1918	14942	27938	2.77	1.0E-90	11420514	NT	Homo sapiens similar to SALL1 (sal (Drosophila)-like (LOC57167), mRNA
2868	15928	28848	7.55	1.0E-90	6005720	NT	Homo sapiens chromosome 8 open reading frame 2 (C8ORF2), mRNA
3865	18904	29810	0.72	1.0E-90	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3865	18904	29811	0.72	1.0E-90	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
4453	17479	30367	1.17	1.0E-90	AF167340.1	NT	Homo sapiens soluble Interleukin 1 receptor accessory protein (IL1RAP) gene, exon 8, alternative exon 9 and complete cds, alternatively spliced
5270	18277	31140	1.7	1.0E-90	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
5270	18277	31141	1.7	1.0E-90	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
5758	18851	32031	1.76	1.0E-90	AB014533.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
5936	19022	32216	0.99	1.0E-90	11428910	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7278	20011	33313	0.87	1.0E-90	U91934.1	NT	Human retina-derived POU-domain factor-1 mRNA, complete cds
7525	20489	33851	0.6	1.0E-90	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7934	20976	34266	2.63	1.0E-90	11428758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
9173	22139	35565	3.96	1.0E-90	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
9648	22592		1.08	1.0E-90	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
9670	22823	36076	1.38	1.0E-90	11422109	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
10990	23910	37424	0.53	1.0E-90	X55545.1	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
10990	23910	37425	0.53	1.0E-90	X55545.1	NT	H. sapiens cDNA for CREB protein
11021	23986	37513	2.13	1.0E-90	R25686.1	EST_HUMAN	H. sapiens cDNA for CREB protein
4224	17253	30140	6.09	8.0E-91	D12234.1	EST_HUMAN	Yg44311.12 Soares infant brain cDNA clone IMAGE:35477 5'
							HUM0003381 Liver HepG2 cell line. Homo sapiens cDNA clone s381 3'

Page 412 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8649	21617	35039	4.36	7.0E-91	11419234	NT	Homo sapiens makorin, ring finger protein, 1 (MKRN1), mRNA
10663	23585	37083	0.67	7.0E-91	AI904151.1	EST_HUMAN	CM-BT043-090299-075 BT043 Homo sapiens cDNA
3488	16534	29459	1.71	5.0E-91	AA702794.1	EST_HUMAN	z90b04.s1 Soares_fetal_liver_spleen_1NPLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
4544	17567	30454	1.05	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
4544	17567	30455	1.05	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
6770	19825	33108	1.19	5.0E-91	AI878995.1	EST_HUMAN	au49f09.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518121 3' similar to SW:ASPG FLAME Q47898 N4-(BETA-N-ACETYLGLUCOSAMINYL)-L-ASPARAGINASE PRECURSOR ;
8547	21515	34933	1.65	5.0E-91	BF314682.1	EST_HUMAN	601901824F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130833 5'
9113	22079	35506	1.28	5.0E-91	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLOBYF08 3'
9113	22079	35507	1.28	5.0E-91	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLOBYF08 3'
12892	25479		2.26	5.0E-91	AI193566.1	EST_HUMAN	q670f11.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1744365 3' similar to contains MIR.b2 MIR MIR repetitive element ;
3216	16270	29182	1.41	4.0E-91	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAA1T-delta) mRNA, complete cds
3216	16270	29193	1.41	4.0E-91	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAA1T-delta) mRNA, complete cds
11276	24228	37755	3.24	4.0E-91	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
12377	25159	31811	1.55	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #36205) Homo sapiens cDNA clone HHCMC60 similar to Retrovirus-related gag polyprotein
12377	25159	31858	1.55	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #36205) Homo sapiens cDNA clone HHCMC60 similar to Retrovirus-related gag polyprotein
1621	14654	27630	5.97	3.0E-91	11430193	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
1621	14654	27631	5.97	3.0E-91	11430193	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
3350	16401	29323	1.76	3.0E-91	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
3476	16522	29446	3.84	3.0E-91	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3476	16522	29446	3.84	3.0E-91	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3802	16842	29750	1.47	3.0E-91	AF084530.1	NT	Homo sapiens cyclin-D binding Myb-like protein mRNA, complete cds
4621	17642	30530	4.36	3.0E-91	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5016	18030	30915	1.3	3.0E-91	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5016	18030	30916	1.3	3.0E-91	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5770	18862	32041	1.43	3.0E-91	11434964	NT	Homo sapiens epididymal secretory protein (19.5kD) (HE1), mRNA
6437	19503		2.97	3.0E-91	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6735	19791	33071	3.34	3.0E-91	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA

Page 413 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6735	19791	33072	3.34	3.0E-91	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
7800	20843	34226	4.07	3.0E-91	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7900	20843	34227	4.07	3.0E-91	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
8278	21247	34859	0.44	3.0E-91	6601589	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9123	22089	35517	2.51	3.0E-91	D16494.1	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9843	22887	36036	0.8	3.0E-91	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
11235	24188	37707	2.53	3.0E-91	AB032179.2	NT	Homo sapiens ERM2 mRNA, complete cds
11538	24477	38028	2.3	3.0E-91	AB028003.1	NT	Homo sapiens mRNA for KIAA1080 protein, partial cds
11536	24477	38027	2.3	3.0E-91	AB028003.1	NT	Homo sapiens mRNA for KIAA1080 protein, partial cds
12820	25314	31784	1.48	3.0E-91	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12850	18335	31174	3.88	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP-1) gene, exon 6
12850	18335	31175	3.88	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP-1) gene, exon 6
60	13170	26078	2.39	1.0E-91	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1250	14286	27252	7.11	1.0E-91	AW449746.1	EST_HUMAN	U1H-B13-aks-d-01-0-U1.s1 NCI_CGAP_Sub55 Homo sapiens cDNA clone IMAGE:2735280 3'
5487	18587	31498	0.73	1.0E-91	11434402	NT	Homo sapiens hypothetical protein PRO1855 (PRO1855), mRNA
7020	20146	33484	1.9	1.0E-91	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157804 5'
7020	20146	33485	1.9	1.0E-91	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157804 5'
8161	21089	34498	0.59	1.0E-91	M20453.1	NT	Human nucleus-encoded mitochondrial aldehyde dehydrogenase 2 (ALDH2) gene, exon 10
1246	14283	27246	6.04	9.0E-92	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
1246	14283	27247	6.04	9.0E-92	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
5538	18635	31576	2.94	9.0E-92	J03007.1	NT	Human Na ⁺ /K ⁺ ATPase alpha-subunit mRNA, partial cds
5886	18781	31953	2.18	9.0E-92	11427149	NT	Homo sapiens hypothetical protein FLJ20280 (FLJ20280), mRNA
6596	19556	32828	3.96	9.0E-92	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
8190	21160	34569	0.47	9.0E-92	AJ250566.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
8190	21160	34570	0.47	9.0E-92	AJ250566.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
8717	21685	35112	1.73	9.0E-92	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
8717	21685	35113	1.73	9.0E-92	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9829	22873	36023	1.69	9.0E-92	11422089	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
92	13208	26132	3.76	8.0E-92	W26367.1	EST_HUMAN	26f3 Human retina cDNA randomly primed sublibrary/Homo sapiens cDNA
285	13380	26308	4.52	8.0E-92	BE386363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3814667 5'
1838	14865	27883	1.06	8.0E-92	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA
1838	14865	27864	1.06	8.0E-92	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA

Page 414 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5140	18149	31028	0.7	8.0E-92	AW157571.1	EST_HUMAN	au83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to
5466	18568	31478	0.84	8.0E-92	AB046820.1	NT	TR:O60302 O60302 KIAA0555 PROTEIN. ; contains element MER22 repetitive element ;
5576	18672	31635	0.81	8.0E-92	AF264717.1	NT	Homo sapiens mRNA for KIAA1600 protein, partial cds
6697	19754	33031	1.19	8.0E-92	AJ000979.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6701	19758	33036	0.79	8.0E-92	AF179428.1	NT	Homo sapiens MCP-4 gene
8154	21092	34491	1.16	8.0E-92	AF251025.2	NT	Homo sapiens DNA polymerase zeta catalytic subunit variant 1 (REV3L) mRNA, complete cds
8428	21397		0.56	8.0E-92	11416961	NT	Homo sapiens double FYVE-containing protein 1 mRNA, complete cds
8768	21735	35155	3.52	8.0E-92	L04193.1	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
8768	21735	35156	3.52	8.0E-92	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8869	21836	35258	0.66	8.0E-92	11428569	NT	Human lens membrane protein (mp19) gene, exon 11
9417	22382	35820	2.48	8.0E-92	AB014511.1	NT	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA
10386	23308	36786	1.86	8.0E-92	Y13829.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
11155	24114	37840	3.34	8.0E-92	AF074393.1	NT	Homo sapiens mRNA for MBNL protein
11688	24654	38233	1.72	8.0E-92	4503340	NT	Homo sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds
27	13147	26046	1.69	7.0E-92	AB031007.1	NT	Homo sapiens dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST) mRNA
238	15836	26262	0.89	7.0E-92	AB018301.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
238	15836	26263	0.89	7.0E-92	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
593	13660		1.22	7.0E-92	AF007822.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
1285	14320	27283	1.14	7.0E-92	4502384	NT	Homo sapiens cytoplasmic Sepsase truncated isoform mRNA, complete cds
2197	15212	28230	3.62	7.0E-92	5031570	NT	Homo sapiens B-cell CLL/lymphoma 7b (BCL7B) mRNA
2197	15212	28231	3.62	7.0E-92	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2570	15571	28591	1.27	7.0E-92	AF167706.1	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2795	15729	28743	2.96	7.0E-92	6005738	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
2763	15755	28776	1.31	7.0E-92	AB031007.1	NT	Homo sapiens NRAS-related gene (D1S155E), mRNA
3356	18314	29327	0.97	7.0E-92	4507500	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
3356	18314	29328	0.97	7.0E-92	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4617	17638	30528	1.44	7.0E-92	S71824.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4617	17638	30529	1.44	7.0E-92	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2960 nt]
4617	17638	30529	1.44	7.0E-92	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2960 nt]

Page 415 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5040	18053	30932	0.91	7.0E-92	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5333	18439	31191	5.57	7.0E-92	AA446206.1	EST_HUMAN	z636d12.1 Soares testis NHT Homo sapiens cDNA clone IMAGE:781176 5'
1591	14923		1.08	5.0E-92	BE390882.1	EST_HUMAN	601283012F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605018 5'
9847	22783		0.42	5.0E-92	W27668.1	EST_HUMAN	36a7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
2776	15768	28788	2.03	3.0E-92	BE099714.1	EST_HUMAN	601501242F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902839 5'
5976	19061	32262	4.55	3.0E-92	AA378336.1	EST_HUMAN	ES191020 Synovial sarcoma Homo sapiens cDNA 5' end similar to similar to ribosomal protein S13
11116	24078	37599	5.32	3.0E-92	X15804.1	NT	Human mRNA for alpha-actinin
11116	24078	37600	5.32	3.0E-92	X15804.1	NT	Human mRNA for alpha-actinin
28	13148	26047	1.09	2.0E-92	4501898	NT	Homo sapiens actinin A receptor, type IIB (ACVR2B) mRNA
180	13280	26205	3.9	2.0E-92	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
180	13280	26206	3.9	2.0E-92	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
750	13811	26753	1.25	2.0E-92	BE289190.1	EST_HUMAN	60118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
750	13811	26754	1.25	2.0E-92	BE289190.1	EST_HUMAN	60118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
1727	14767		1.4	2.0E-92	S78653.1	NT	mrp-mae-related [human, Genomic, 2416 nt]
1953	14976	27976	1.73	2.0E-92	AI818119.1	EST_HUMAN	wk27d07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR:Q12844
1953	14976	27977	1.73	2.0E-92	AI818119.1	EST_HUMAN	Q12844 BREAKPOINT: CLUSTER REGION PROTEIN ;
2064	15082	28101	6.36	2.0E-92	4506860	NT	wk27d07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR:Q12844
2688	15665	28684	21.32	2.0E-92	6912457	NT	Q12844 BREAKPOINT: CLUSTER REGION PROTEIN ;
3627	16670	29582	1.17	2.0E-92	AF231919.1	NT	Homo sapiens syndecan 4 (amphiglycan, ryudocan) (SDC4) mRNA
3627	16670	29583	1.17	2.0E-92	AF231919.1	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
3627	16670	29583	1.17	2.0E-92	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3698	16741	29654	5.32	2.0E-92	5803180	NT	Homo sapiens chromosome 21 unknown mRNA
4318	17347	30231	1.4	2.0E-92	M10976.1	NT	Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp90-organizing protein) (STIP1), mRNA
5029	18043		2.37	2.0E-92	AL040437.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
5853	18944	32129	0.53	2.0E-92	AF016535.1	NT	DKFZp434C0414.1_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C0414 5'
6434	19500		13.83	2.0E-92	4504756	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
6768	19822	33104	2.24	2.0E-92	AB028691.1	NT	Homo sapiens integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL) mRNA
7701	20658		0.81	2.0E-92	U67780.1	NT	Homo sapiens mRNA for KIAA1068 protein, partial cds
7730	20669		0.71	2.0E-92	U67780.1	NT	Human NPY Y1-like receptor pseudogene mRNA, complete cds
9207	22173	35604	1.91	2.0E-92	AW340174.1	EST_HUMAN	Human NPY Y1-like receptor pseudogene mRNA, complete cds
							hcd02h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2608371 3' similar to TR:Q02711
							Q02711 PRO-POLYDUTPASE POLYPROTEIN ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11112	24072	37594	4.68	2.0E-92	11434900	NT	Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA
11389	24335	37864	4.54	2.0E-92	5803103	NT	Homo sapiens male-specific lethal-3 (Drosophila)-like 1 (MSL3L1), mRNA
12716	25370	31773	3.76	2.0E-92	AB029016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12983	15665	28684	2.95	2.0E-92	5912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1867	14892	27890	1.77	1.0E-92	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta NB2HP Homo sapiens cDNA clone IMAGE:145574 5'
1867	14892	27891	1.77	1.0E-92	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta NB2HP Homo sapiens cDNA clone IMAGE:145574 5'
2087	15104	28122	34.86	1.0E-92	4506668	NT	Homo sapiens ribosomal protein, large, P1 (RPLP1), mRNA
8690	21558	34974	0.77	1.0E-92	BE439625.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
9519	22482	35927	3.43	1.0E-92	AI380356.1	EST_HUMAN	ig01b02.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ; contains Alu repetitive element; contains element MER17 repetitive element ;
9519	22482	35928	3.43	1.0E-92	AI380356.1	EST_HUMAN	ig01b02.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ; contains Alu repetitive element; contains element MER17 repetitive element ;
2044	15063	28083	2.77	9.0E-93	AU121681.1	EST_HUMAN	AUT121681 MAMMA1 Homo sapiens cDNA clone MAMMA1000738 5'
2058	15077		11.43	9.0E-93	AA316723.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2655	15552		1.44	9.0E-93	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3628	16671	29584	1.44	9.0E-93	BE398571.1	EST_HUMAN	601281887F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603832 5'
11959	24838		35.01	9.0E-93	11418526	NT	Homo sapiens ribosomal protein L10a (RPL10A), mRNA
5585	19646	32913	0.52	8.0E-93	AW014042.1	EST_HUMAN	UI-P-B10-aah-h-06-0-UI.st NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709371 3'
5585	19645	32914	0.52	8.0E-93	AW014042.1	EST_HUMAN	UI-P-B10-aah-h-06-0-UI.st NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709371 3'
6744	19799	33079	3.82	8.0E-93	BF036364.1	EST_HUMAN	601460321F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863908 5'
246	13343	28288	9.15	7.0E-93	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3091	16149	29063	1.56	6.0E-93	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6096	19175	32391	0.59	6.0E-93	11460204	NT	Homo sapiens hypothetical protein FLJ10897 (FLJ10897), mRNA
6096	19175	32392	0.59	6.0E-93	11460204	NT	Homo sapiens hypothetical protein FLJ10897 (FLJ10897), mRNA
6838	19891	33186	0.99	6.0E-93	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
7101	20035	33338	1.14	6.0E-93	AF095771.1	NT	Homo sapiens PTH-responsive osteosarcoma B1 protein (B1) mRNA, complete cds
1381	14415	27385	3.77	5.0E-93	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
1406	14439	27408	4.78	5.0E-93	AF674184.1	EST_HUMAN	wc09c08.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2314670 3'
1406	14439	27409	4.78	5.0E-93	AF674184.1	EST_HUMAN	wc09c08.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2314670 3'
1471	14504		1.02	5.0E-93	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001

Page 417 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3247	16302	29226	3.91	5.0E-93	X04201.1	NT	Human skeletal muscle 1.3 kb mRNA for tropomyosin
5697	18984	32175	0.9	5.0E-93	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
6230	19304		1.22	5.0E-93	AF045555.1	NT	Homo sapiens wiser1 (WBSOR1) and wiser5 (WBSOR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
7982	20921	34312	3.32	5.0E-93	AF067136.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 11, complete cds and alternatively spliced product
8952	21918	35343	0.56	5.0E-93	4557626	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8952	21918	35344	0.56	5.0E-93	4557626	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
9881	22908	36373	2.06	5.0E-93	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10166	23091	36569	1.33	5.0E-93	5032156	NT	Homo sapiens TAR (HIV) RNA-binding protein 1 (TARBP1) mRNA
10430	23352	36836	1.59	5.0E-93	AF066313.2	NT	Homo sapiens WSB1 protein (WSB1) mRNA, complete cds
11174	24131	37661	2.48	5.0E-93	11499599	NT	Homo sapiens nucleobindin 2 (NUCB2) mRNA
12627	25622	31677	2.55	5.0E-93	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
13096	25622	31677	1.32	5.0E-93	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
88	13204		7.06	4.0E-93	AA459933.1	EST_HUMAN	2x50609.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:795688 3' similar to SW:CLPA_RAT P37397 CALPONIN, ACIDIC ISOFORM;
445	13516	26450	1.25	4.0E-93	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
445	13516	26451	1.25	4.0E-93	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
773	13832	26777	1.38	4.0E-93	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
773	13832	26778	1.38	4.0E-93	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
1187	14227	27183	1.62	4.0E-93	8923658	NT	Homo sapiens hypothetical protein FLJ20731 (FLJ20731), mRNA
1984	15015	28022	4.21	4.0E-93	AF047677.1	NT	Homo sapiens dystrophin (DMD) gene, deletion breakpoints 1-3 in intron 5
2615	15913	28638	1.08	4.0E-93	7856972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
3580	16625	29546	0.94	4.0E-93	7705396	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
4078	17113	30009	2.01	4.0E-93	4504654	NT	Homo sapiens interleukin 18 receptor 1 (IL18R1) mRNA
5058	16625	29546	0.93	4.0E-93	7705396	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
5727	18821	32001	4.28	4.0E-93	T46864.1	EST_HUMAN	yb94c12.r1 Stragene liver (#937224) Homo sapiens cDNA clone IMAGE:78838 5' similar to similar to SP:A44391 A44391 SERUM RESPONSE ELEMENT-BINDING PROTEIN SRE-ZBP - HUMAN,
11486	24411	37850	13.22	4.0E-93	AV692051.1	EST_HUMAN	AV692051 GK Homo sapiens cDNA clone GKCDRF07 5'
3665	16708	29622	9.21	3.0E-93	BF690630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332036 5'
3665	16708	29623	9.21	3.0E-93	BF690630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332036 5'
4263	17292		1.23	3.0E-93	AF225896.1	NT	Homo sapiens tensin mRNA, complete cds

Page 418 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5881	18970	32161	0.56	3.0E-93	AI553853.1	EST_HUMAN	tn29g03.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2169076 3'
5881	18970	32162	0.56	3.0E-93	AI553853.1	EST_HUMAN	tn29g03.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2169076 3'
6715	19771	33051	1.55	3.0E-93	11426182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
11152	24112	37637	3.04	3.0E-93	AI824829.1	EST_HUMAN	w602d05.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2304489 3'
192	13293	26219	8.05	2.0E-93	AB015610.1	NT	Chlorococcus aethiops mRNA for ribosomal protein S4X, complete cds
192	13293	26220	8.05	2.0E-93	AB015610.1	NT	Chlorococcus aethiops mRNA for ribosomal protein S4X, complete cds
323	13415	26340	12.88	2.0E-93	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
324	13415	26340	8.91	2.0E-93	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
2140	15157	28173	1.15	2.0E-93	U40763.1	NT	Human Cdk-associated RS cyclophilin CARs-Cyp mRNA, complete cds
2494	15497	28523	2.03	2.0E-93	BE252982.1	EST_HUMAN	601117586F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3358220 5'
5491	18591	31502	5.04	2.0E-93	AW964385.1	EST_HUMAN	EST1376458 MAGE sequences; MAGH Homo sapiens cDNA
5502	18602	31531	0.79	2.0E-93	4758153	NT	Homo sapiens deafness, autosomal dominant 5 (DFNA5), mRNA
5621	18717		0.63	2.0E-93	BF351459.1	EST_HUMAN	QV3-HT0513-290300-126-h04 HT0513 Homo sapiens cDNA
5720	18814	31993	1.08	2.0E-93	11430039	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
5734	18828	32006	0.7	2.0E-93	U74313.1	EST_HUMAN	HSU74313 Human chromosome 14 Homo sapiens cDNA clone 1-86
6841	19894		1.06	2.0E-93	AW502002.1	EST_HUMAN	U1-HF-BND-aks-g-09-U1r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078329 5'
12520	25251		3.14	2.0E-93	AA126735.1	EST_HUMAN	228c10.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:5033346 3'
12601	25303		2.69	2.0E-93	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
12853	25461		3.49	2.0E-93	BF035327.1	EST_HUMAN	60145853T1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
103	13219	26143	1.82	1.0E-93	AF238997.1	NT	Homo sapiens CTR1 pseudogene
103	13219	26144	1.82	1.0E-93	AF238997.1	NT	Homo sapiens CTR1 pseudogene
519	13590	26510	16.6	1.0E-93	7657016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
602	13669	26583	5.09	1.0E-93	AI146755.1	EST_HUMAN	oy64b08.x1 NCI_CGAP_CL1.1 Homo sapiens cDNA clone IMAGE:1672503 3' similar to TR:Q62384 Q62384
873	13929	26887	4.11	1.0E-93	D87675.1	NT	ZINC FINGER PROTEIN ;
1241	14277	27237	8.85	1.0E-93	8923270	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1241	14277	27238	8.85	1.0E-93	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
2344	15354	28375	1.27	1.0E-93	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
2471	15475	28499	9.52	1.0E-93	AF055066.1	NT	Homo sapiens MHC class 1 region
2833	14334	27296	2.05	1.0E-93	BE297369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2833	14334	27297	2.05	1.0E-93	BE297369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2945	16003	28928	2.18	1.0E-93	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3229	16284		1.3	1.0E-93	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
4460	17486	30373	1.99	1.0E-93	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5646	18742	31907	1.66	1.0E-93	U78509.1	NT	Homo sapiens glucocorticoid receptor (GR) gene, intron D, exon 5, and intron E
5648	18742	31908	1.66	1.0E-93	U78509.1	NT	Homo sapiens glucocorticoid receptor (GR) gene, intron D, exon 5, and intron E
5859	18949	32135	1.02	1.0E-93	AF227138.1	NT	Homo sapiens candidate taste receptor 12R14 gene, complete cds
6022	19105	32308	10.63	1.0E-93	4557792	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1) mRNA
6321	19392	32633	0.91	1.0E-93	7692241	NT	Homo sapiens KIAA0672 gene product (KIAA0672), mRNA
6959	20184	33507	2.08	1.0E-93	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7462	20428	33785	3.07	1.0E-93	D42072.1	NT	Human mRNA for NF1 N-isoform-exon11, complete cds
8803	21571	34987	1.97	1.0E-93	AB037832.1	NT	Homo sapiens mRNA for KIAA1441 protein, partial cds
8888	21854	35274	1.12	1.0E-93	Y10183.1	NT	H. sapiens mRNA for MEMD protein
8996	21962	35387	1.29	1.0E-93	AF182032.1	NT	Homo sapiens protein kinase inhibitor gamma (PKIG) mRNA, complete cds
9378	22344	35775	0.47	1.0E-93	AB023228.1	NT	Homo sapiens mRNA for KIAA1011 protein, partial cds
9379	22344	35776	0.47	1.0E-93	AB023228.1	NT	Homo sapiens mRNA for KIAA1011 protein, partial cds
9807	21130	34533	1.85	1.0E-93	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9811	21134	34537	1.04	1.0E-93	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9946	22873	36333	4.08	1.0E-93	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9946	22873	36334	4.08	1.0E-93	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
10083	23010	36482	0.71	1.0E-93	AL048801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10504	23426	36924	0.63	1.0E-93	11433646	NT	Homo sapiens ryandoline receptor 3 (RYR3), mRNA
12763	25405		2.11	1.0E-93	AJ230125.1	NT	Homo sapiens GGT1 gene, exon 1
12847	26457		3.14	1.0E-93	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
10956	23876		1.25	8.0E-94	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3986	17026	29937	2.15	6.0E-94	AF142482.1	NT	Homo sapiens transcription enhancer factor-5 mRNA, complete cds
5441	18543	31454	3.23	5.0E-94	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
5441	18543	31455	3.23	5.0E-94	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
6166	19241	32472	3.06	5.0E-94	AA722434.1	EST_HUMAN	2987g06.s1 Soares_fetal_hear_NbHH19W Homo sapiens cDNA clone IMAGE:409594 3'
7206	20230	33562	1.34	5.0E-94	AJ015800.1	EST_HUMAN	0183405.s1 Soares_fetal_hear_NbHH19W Homo sapiens cDNA clone IMAGE:1623369 3'
8986	21962	35376	0.82	5.0E-94	BF529115.1	EST_HUMAN	602042163F1 NCI_OGAP_Brm67 Homo sapiens cDNA clone IMAGE:4180023 5'
11318	24268	37795	2.81	5.0E-94	11423962	NT	Homo sapiens adenylate kinase 2 (AK2), mRNA
11318	24268	37796	2.81	5.0E-94	11423962	NT	Homo sapiens adenylate kinase 2 (AK2), mRNA
12497	25965	31318	6.07	5.0E-94	T89398.1	EST_HUMAN	yd88b04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:116239 3'

Page 420 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
13048	25588		1.9	5.0E-94	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
1859	14885		9.09	4.0E-94	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
2666	15663	28682	1	4.0E-94	4506008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
4748	17768	30664	2.95	4.0E-94	AB91312.1	EST_HUMAN	tw11f10.x1 NCJ_CGAP_Bn52 Homo sapiens cDNA clone IMAGE:2259403 3' similar to TR:Q15285 Q15265 PROTEIN TYROSINE PHOSPHATASE ;
6612	19670	32947	1.96	4.0E-94	11440870	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6612	19670	32948	1.96	4.0E-94	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
7097	20031		0.99	4.0E-94	L27386.1	NT	Homo sapiens huntingtin (HD) gene, exon 37
11782	23937	37458	1.83	4.0E-94	11545792	NT	Homo sapiens hypothetical protein FLJ12455 (FLJ12455), mRNA
613	13678	26594	2.23	3.0E-94	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
722	13784	26718	1.02	3.0E-94	4502506	NT	Homo sapiens complement component 5 (C5) mRNA
1754	14783	27767	1.12	3.0E-94	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1754	14783	27768	1.12	3.0E-94	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1787	14816	27801	4.2	3.0E-94	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
5764	18556	32037	3.32	3.0E-94	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6274	19347	32579	0.99	3.0E-94	AB011536.1	NT	Homo sapiens mRNA for MEGF2, partial cds
6594	19654	32928	4.91	3.0E-94	11526228	NT	Homo sapiens chromosome 21 open reading frame 18 (C21ORF18), mRNA
8088	21024	34423	0.52	3.0E-94	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
8540	21608	34925	1.03	3.0E-94	AF152309.1	NT	Homo sapiens protocadherin alpha 13 (PCDH-alpha13) mRNA, complete cds
8934	21900	35327	4.93	3.0E-94	AB014579.1	NT	Homo sapiens mRNA for KIAA0679 protein, partial cds
9950	22877	36340	4.37	3.0E-94	AF087942.1	NT	Homo sapiens glycogenin-1L mRNA, complete cds
11438	24379	37919	3.76	3.0E-94	4757821	NT	Homo sapiens axonal transport of synaptic vesicles (ATSV) mRNA
11987	24864	38480	2.17	3.0E-94	U28711.1	NT	Human cbl-b truncated form 1 lacking leucine zipper mRNA, complete cds
10110	23036	36514	0.66	2.0E-94	A1910393.1	EST_HUMAN	w30h11.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2391813 3'
10110	23036	36515	0.66	2.0E-94	A1910393.1	EST_HUMAN	w30h11.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2391813 3'
150	13253	26182	2.81	1.0E-94	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3105	16162	29073	2.24	1.0E-94	BE253433.1	EST_HUMAN	601116966F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
3105	16162	29074	2.24	1.0E-94	BE253433.1	EST_HUMAN	601116966F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
4386	17414	30299	1.18	1.0E-94	9506692	NT	Homo sapiens hypothetical protein (FLJ20746), mRNA
6191	19285	32501	0.65	1.0E-94	AE000286.1	NT	Escherichia coli K-12 MG1655 section 159 of 400 of the complete genome
6397	19465	32711	0.81	1.0E-94	AL040518.1	EST_HUMAN	DKFZp434G0314_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G0314 5'
6406	19474	32722	0.77	1.0E-94	H08270.1	EST_HUMAN	y87f02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:45053 5'

Page 421 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6668	19725	33000	0.56	1.0E-94	AV725992.1	EST_HUMAN	AV725992 HTG Homo sapiens cDNA clone HTCBEF05 5'
8450	21419	34833	0.56	1.0E-94	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8450	21419	34834	0.56	1.0E-94	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9611	22615	36067	2.57	1.0E-94	11428710	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA
10148	23072	36547	1.93	1.0E-94	BE780478.1	EST_HUMAN	601488748F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872099 5'
11405	24349	37681	2.77	1.0E-94	U65590.1	NT	Homo sapiens IL-1 receptor antagonist IL-1Ra (IL-1RN) gene, alternatively spliced forms, complete cds
11946	24583	38151	1.94	1.0E-94	AI272244.1	EST_HUMAN	ap22e02.x1 Schiller oligodendrogloma Homo sapiens cDNA clone IMAGE:1956122 3' similar to TR:Q62845
12050	24923	38520	3.39	1.0E-94	11418871	NT	Q62845 NEURAL CELL ADHESION PROTEIN BIG-2 PRECURSOR ;
12615	13253	26182	1.43	1.0E-94	BE295714.1	EST_HUMAN	Homo sapiens KIAA0164 gene product (KIAA0164), mRNA
12887	13253	26182	1.31	1.0E-94	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
1473	14506	27480	1.3	9.0E-95	AF027302.1	NT	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3170	16225	29140	1.19	9.0E-95	7662027	NT	Homo sapiens TNF-alpha stimulated ABC protein (ABCS0), complete cds
3170	16225	29141	1.19	9.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5479	18579	31489	1.38	9.0E-95	X82569.1	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5479	18579	31490	1.38	9.0E-95	X82569.1	NT	M.musculus gylT1 gene (exons 1c and 2)
8595	21563	34977	1.61	9.0E-95	AF274753.1	NT	M.musculus gylT1 gene (exons 1c and 2)
4567	17590	30482	1.82	8.0E-95	AI700998.1	EST_HUMAN	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
4567	17590	30483	1.82	8.0E-95	AI700998.1	EST_HUMAN	we09e04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340606 3' similar to gb:K00558
7136	20112	33425	0.83	8.0E-95	11419376	NT	TUBULIN ALPHA-1 CHAIN (HUMAN);
7452	20418	33773	1.55	8.0E-95	11426529	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
7452	20418	33774	1.55	8.0E-95	11426529	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
8539	21507	34924	2.02	8.0E-95	AF032897.1	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
9720	22748	36200	1.97	8.0E-95	11420944	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
9720	22748	36200	1.97	8.0E-95	11420944	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
10207	23132	36619	2.67	8.0E-95	5174644	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
10238	23163	36619	3.08	8.0E-95	AB037816.1	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
10595	23517	37008	0.8	8.0E-95	9846523	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
11813	24698	38279	2.21	8.0E-95	10864024	NT	Homo sapiens early growth response 2 (Krox-20 (Drosophila) homolog) (EGR2), mRNA
12820	25442		29.02	8.0E-95	AA629066.1	EST_HUMAN	Homo sapiens HCF-binding transcription factor Zhangfei (ZF), mRNA
							zu84601.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:744649 3' similar to contains L1.11 L1 repetitive element;

Page 422 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
275	13371	26298	6.59	7.0E-95	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
275	13371	26299	6.59	7.0E-95	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4394	17422	30307	4.55	7.0E-95	M95708.1	NT	Homo sapiens Ly-6-like protein (CD59) mRNA, complete cds
4443	17499		1.26	7.0E-95	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
5090	18100	30976	1	7.0E-95	M95929.1	NT	Human homeobox protein (PHOX1) mRNA, 3' end
9572	22534	35985	0.82	4.0E-95	BE439625.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
12013	24890	39487	1.93	4.0E-95	AW950634.1	EST_HUMAN	EST362704 MAGC resequences, MAGA Homo sapiens cDNA
12013	24890	39488	1.93	4.0E-95	AW950634.1	EST_HUMAN	EST362704 MAGC resequences, MAGA Homo sapiens cDNA
12065	24938	38534	1.79	4.0E-95	BF371302.1	EST_HUMAN	RC8-FN0114-090800-011-B07 FN0114 Homo sapiens cDNA
5517	18617	31550	1.61	3.0E-95	BF528041.1	EST_HUMAN	602071146F1 NC1 CGAP_Bn84 Homo sapiens cDNA clone IMAGE:4214147 5'
5757	25644	32030	0.54	3.0E-95	4503354	NT	Homo sapiens dedicator of cyto-kinesis 1 (DOCK1) mRNA
7593	20554	33913	1	3.0E-95	AW988121.1	EST_HUMAN	EST370191 MAGC resequences, MAGC Homo sapiens cDNA
7593	20554	33914	1	3.0E-95	AW988121.1	EST_HUMAN	EST370191 MAGC resequences, MAGC Homo sapiens cDNA
9710	22663	38119	1.75	3.0E-95	7662280	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9710	22663	38120	1.75	3.0E-95	7662280	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
10104	23030	39508	0.69	3.0E-95	BF213446.1	EST_HUMAN	601845212F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4070451 5'
1651	14683	27656	2.18	2.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1651	14683	27657	2.18	2.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1958	14980	27982	2.13	2.0E-95	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
1961	14983	27986	1.36	2.0E-95	BE393873.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658862 5'
2433	15440	28457	1.43	2.0E-95	5453665	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2433	15440	28458	1.43	2.0E-95	5453665	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2473	15477	28500	3.35	2.0E-95	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2520	15523	28545	1.2	2.0E-95	4758423	NT	Homo sapiens glycine cleavage system protein H (aminomethyl carrier) (GCSH) mRNA
3171	16226	29142	2.48	2.0E-95	AF015452.1	NT	Homo sapiens Uspurin-gamma mRNA, complete cds
3577	16622	29542	2.93	2.0E-95	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3577	16622	29543	2.93	2.0E-95	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3631	16674	29587	0.93	2.0E-95	AB037807.1	NT	Homo sapiens mRNA for KIAA1386 protein, partial cds
3763	16805	29716	1.09	2.0E-95	AI290284.1	EST_HUMAN	qm01c02.x1 Soares_NHHMPu_S1 Homo sapiens cDNA clone IMAGE:1890546 3' similar to WP.T23G7.4
4388	17416	30300	1.69	2.0E-95	7657185	NT	CE03705; Homo sapiens hypodermal protein (HS222B1A), mRNA
5077	18087	30967	2.92	2.0E-95	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA

Page 423 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5557	18654	31598	4.36	2.0E-95	7705764	NT	Homo sapiens CGI-48 protein (LOC51096), mRNA
5557	18654	31599	4.36	2.0E-95	7705764	NT	Homo sapiens CGI-48 protein (LOC51096), mRNA
5782	18874	32055	1.22	2.0E-95	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5782	18874	32056	1.22	2.0E-95	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5827	18917	32101	0.67	2.0E-95	11525893	NT	Homo sapiens membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) (MPP3), mRNA
6265	18338	32571	3.71	2.0E-95	M59724.1	NT	Human muscle-type phosphofructokinase (PFK-M) gene, exon 7
6592	18652	32923	1.01	2.0E-95	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6592	18652	32924	1.01	2.0E-95	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6722	18778	33057	2.39	2.0E-95	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9), mRNA, complete cds
6928	20152	33471	1.37	2.0E-95	11435773	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
8498	22482	35803	2.51	2.0E-95	11421795	NT	Homo sapiens ribophorin II (RPN2), mRNA
10747	23699	37166	0.54	2.0E-95	11434330	NT	Homo sapiens KIAA1065 protein (KIAA1065), mRNA
11078	24040	37584	1.72	2.0E-95	4757853	NT	Homo sapiens bone morphogenetic protein receptor, type IA (BMPRIA), mRNA
12011	24898	38484	2.35	2.0E-95	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12011	24898	38485	2.35	2.0E-95	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12587	25291	31782	2.89	2.0E-95	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12984	25546	31718	6.81	2.0E-95	11418164	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
5696	18791	31862	7.21	1.0E-95	AA284651.1	EST_HUMAN	223h04.r1 Soares ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.6 ;
5696	18791	31863	7.21	1.0E-95	AA284651.1	EST_HUMAN	223h04.r1 Soares ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.6 ;
7757	20710	34078	4.21	1.0E-95	BF370000.1	EST_HUMAN	RC6-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
7757	20710	34080	4.21	1.0E-95	BF370000.1	EST_HUMAN	RC6-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
8536	21504	34922	1.58	9.0E-96	BE897299.1	EST_HUMAN	601437232F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922423 5'
442	15840	26447	1.36	8.0E-96	BE907607.1	EST_HUMAN	601497609F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899761 5'
442	15840	26448	1.36	8.0E-96	BE907607.1	EST_HUMAN	601497609F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899761 5'
5589	18885	26448	2.28	8.0E-96	AW836047.1	EST_HUMAN	PMO-L T0019-090300-002-409 L T0019 Homo sapiens cDNA
3929	16969	26882	1.06	7.0E-96	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
3329	16380	28301	0.64	6.0E-96	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3494	16541	29465	15.12	6.0E-96	M26873.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase pseudogene 3'end
5722	18816	31995	0.82	6.0E-96	11422642	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminide alpha 2,3-sialyltransferase) (SIAT6), mRNA

Page 424 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11872	24754	38335	2.59	6.0E-96	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11872	24754	38336	2.59	6.0E-96	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11918	24799	38390	2.78	6.0E-96	8923839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
320	13412	26336	3.08	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
843	13899	26855	3.47	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
843	13899	26856	3.47	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
2626	15625		1.23	5.0E-96	11418767	NT	Homo sapiens phosphodiesterase 9A, cGMP-specific, rod, alpha (PDE9A), mRNA
3039	16097	29013	0.71	5.0E-96	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
4940	17956		0.93	5.0E-96	X60812.1	NT	H. sapiens DNA for monomine oxidase type A (7) (partial)
5233	18241	31113	0.93	5.0E-96	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
6807	19861	33148	1.15	5.0E-96	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6870	19923	33219	0.5	5.0E-96	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3)-deoxyribonucleotidase (dNT-2 gene), exons 1-5
6949	20173	33496	4.02	5.0E-96	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6949	20173	33497	4.02	5.0E-96	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
7219	20241	33576	0.78	5.0E-96	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7758	20711	34081	0.7	5.0E-96	AB024334.1	NT	Homo sapiens mRNA for 14-3-3gamma, complete cds
8443	21412	34825	6.11	5.0E-96	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
8443	21412	34826	6.11	5.0E-96	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
12076	24948	38543	1.51	5.0E-96	7661973	NT	Homo sapiens KIAA0175 gene product (KIAA0175), mRNA
4219	17248		7.1	3.0E-96	H68656.1	EST_HUMAN	yr87h12.1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:212327 5'
415	13488		4.65	2.0E-96	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
748	13809	26750	1.12	2.0E-96	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4790	17608	30700	1.39	2.0E-96	BE148074.1	EST_HUMAN	RC3-HT0230-040500-110-g02 HT0230 Homo sapiens cDNA
7696	20654	34017	0.58	2.0E-96	BF369731.1	EST_HUMAN	QV4-GN0120-250900-427-b12 GN0120 Homo sapiens cDNA
7696	20654	34018	0.58	2.0E-96	BF369731.1	EST_HUMAN	QV4-GN0120-250900-427-b12 GN0120 Homo sapiens cDNA
9332	22297		5.83	2.0E-96	AV689481.1	EST_HUMAN	AV689481 GK6 Homo sapiens cDNA clone GKCFMD07 5'
12285	25102		3.08	2.0E-96	AW249440.1	EST_HUMAN	2819351.5p1me NIH_MGC 7 Homo sapiens cDNA clone IMAGE:2819351 5'
672	13736	26663	2.47	1.0E-96	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
1796	14825	27809	2.35	1.0E-96	AW955054.1	EST_HUMAN	EST367124 MAGC resequences, MAGC Homo sapiens cDNA
1796	14825	27810	2.35	1.0E-96	AW955054.1	EST_HUMAN	EST367124 MAGC resequences, MAGC Homo sapiens cDNA
2237	15251	28274	1.04	1.0E-96	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2237	15251	28275	1.04	1.0E-96	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
7158	18390	31234	1.15	1.0E-96	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA

Page 425 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7250	19885	33283	0.55	1.0E-96	6912455	NT	Homo sapiens guanine nucleotide exchange factor for Rap1 (KIAA0277), mRNA
8555	21523	34941	1.35	1.0E-96	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8555	21523	34942	1.35	1.0E-96	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
9036	22032	35455	24.51	1.0E-96	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
9202	22168	35598	2.21	1.0E-96	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10520	23442	36939	0.91	1.0E-96	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
10520	23442	36940	0.91	1.0E-96	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
12272	18332	31169	1.59	1.0E-96	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
12272	18332	31170	1.59	1.0E-96	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
3338	16389	28910	0.65	6.0E-97	BF245240.1	EST_HUMAN	601863712F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4081202 5'
7806	20756		3.82	6.0E-97	BE141849.1	EST_HUMAN	IL5-HT0117-011099-004-D07 HT0117 Homo sapiens cDNA
9286	22252	35682	0.85	6.0E-97	BE888012.1	EST_HUMAN	601440317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925133 5'
9286	22252	35683	0.85	6.0E-97	BE888012.1	EST_HUMAN	601440317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925133 5'
10959	23879	37391	0.71	6.0E-97	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
10959	23879	37392	0.71	6.0E-97	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
11734	24820	38198	3.43	6.0E-97	X18804.1	NT	Human mRNA for alpha-actinin
8348	21317	34732	2.27	5.0E-97	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone IMAGE:787768 3' similar to TR:G1304125
8482	21450	34868	13.95	5.0E-97	AA418028.1	EST_HUMAN	z07e12.s1 Soares_NhrIMPu_S1 Homo sapiens cDNA clone IMAGE:787768 3' similar to TR:G1304125
10034	22961	36429	2.61	5.0E-97	BF154912.1	EST_HUMAN	G1304125 PMS4 MRNA ;
11873	24755	38337	1.75	5.0E-97	BE146597.1	EST_HUMAN	RCO-BT0812-250900-032-a09 BT0812 Homo sapiens cDNA
11873	24755	38338	1.75	5.0E-97	BE146597.1	EST_HUMAN	MRO-HT0241-150500-010-b02 HT0241 Homo sapiens cDNA
938	13991	26943	2.4	4.0E-97	BE004436.1	EST_HUMAN	MRO-HT0241-150500-010-b02 HT0241 Homo sapiens cDNA
948	14001	26953	1.87	4.0E-97	AB030176.1	NT	CMO-BN0106-170300-293-a06 BN0106 Homo sapiens cDNA
948	14001	26954	1.87	4.0E-97	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
1825	14949	27945	0.99	4.0E-97		NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
5645	18741	31906	0.66	4.0E-97		NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
5956	19041	32239	0.52	4.0E-97	U09002.1	NT	Homo sapiens apolipoprotein H (beta-2-glycoprotein I) (APOH) mRNA
5956	19041	32240	0.52	4.0E-97	U09002.1	NT	Human N-methyl-D-aspartate receptor modulatory subunit 2A (hNR2A) mRNA, complete cds
6997	20123	33437	6.9	4.0E-97	Y11339.2	NT	Human N-methyl-D-aspartate receptor modulatory subunit 2A (hNR2A) mRNA, complete cds
6997	20123	33438	5.9	4.0E-97	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase I, long form
7217	20239	33573	1.35	4.0E-97	7710125	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase I, long form
7217	20239	33573	1.35	4.0E-97	7710125	NT	Homo sapiens ligase II, DNA, ATP-dependent (LIG3), transcript variant alpha, mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7270	20005	33305	0.94	4.0E-97	11422155	NT	Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
8474	21443	34860	0.88	4.0E-97	4557708	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2) mRNA
8701	21669	35092	1.62	4.0E-97	11421783	NT	Homo sapiens v-src avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), mRNA
8826	21892	35320	0.49	4.0E-97	11431060	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
8967	21933	35358	0.78	4.0E-97	11423233	NT	Homo sapiens cytochrome P450, subfamily 1B, polypeptide 1 (CYP4B1), mRNA
9603	22607	36056	1.36	4.0E-97	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
9603	22607	36057	1.36	4.0E-97	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
10803	23724	37226	0.79	4.0E-97	11431060	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
11498	24441	37891	2.15	4.0E-97	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11498	24441	37892	2.15	4.0E-97	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
12467	25216	26266	7.99	4.0E-97	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
243	13341	26266	1.01	3.0E-97	AB032988.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
875	13931	26889	2.71	3.0E-97	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
875	13931	26890	2.71	3.0E-97	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1435	15868	27446	1.72	3.0E-97	4758813	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
2445	15825	28470	1.57	3.0E-97	U38255.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 7
3185	16240	29158	2.22	3.0E-97	K02212.1	NT	Human alpha-1-antitrypsin gene (S variant), complete cds
3274	16328	29249	1.01	3.0E-97	5174478	NT	Homo sapiens pericentriin (PCNT) mRNA
4815	17832	30730	18.15	1.0E-97	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
6567	19827	32892	2.5	1.0E-97	BE566486.1	EST_HUMAN	601339520F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3681821 5'
9799	21122	34525	0.51	1.0E-97	AW378976.1	EST_HUMAN	RCO-HT0258-211199-011-g05 HT0258 Homo sapiens cDNA
9799	21122	34526	0.51	1.0E-97	AW378976.1	EST_HUMAN	RCO-HT0258-211199-011-g05 HT0258 Homo sapiens cDNA
10122	23048	36527	1.46	1.0E-97	R10887.1	EST_HUMAN	y38c08.s1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:129134 3'
11062	24025	37549	3.07	1.0E-97	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11062	24025	37550	3.07	1.0E-97	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11639	24576	38142	1.67	1.0E-97	AA553761.1	EST_HUMAN	nk29g02.s1 NCI_CGAP_C011 Homo sapiens cDNA clone IMAGE:1014662 3'
11796	23951	37472	35.59	1.0E-97	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
11796	23951	37473	35.59	1.0E-97	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
902	13957	26914	1.43	9.0E-98	BE090973.1	EST_HUMAN	PM4-BT0724-010400-008-a12 BT0724 Homo sapiens cDNA
1281	14316	27278	2.02	9.0E-98	8393092	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
6435	19501		0.63	9.0E-98	AJ250713.1	NT	Homo sapiens CLDN12 gene for claudin-12

Page 427 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7507	20472	33832	0.55	9.0E-98	7661871	NT	Homo sapiens leucyl-tRNA synthetase, mitochondrial (KIAA0028), mRNA
7617	20577	33940	0.66	9.0E-98	11419408	NT	Homo sapiens A kinase (PRKA) anchor protein (yotiao) 9 (AKAP9), mRNA
8257	21228	34636	5.5	9.0E-98	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
8257	21226	34637	5.5	9.0E-98	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
9471	22435	35873	2.01	9.0E-98	X06889.1	NT	Human mRNA for amyloid A4(751) protein
9579	22541	35991	1.44	9.0E-98	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
9647	22591	36040	1.49	9.0E-98	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
9694	22647		0.83	9.0E-98	AF057726.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exon 8
9722	22760	36202	1.16	9.0E-98	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
9722	22750	36203	1.16	9.0E-98	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
10623	23545	37045	0.5	9.0E-98	AF141325.2	NT	Homo sapiens inositol polyphosphate 1-phosphatase (INPP1) gene, complete cds
11346	24296	37823	2.06	9.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11346	24296	37824	2.06	9.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11407	24351	37883	1.75	9.0E-98	11418982	NT	Homo sapiens mitogen-activated protein kinase kinase 7 (MAP3K7), mRNA
28	13146		2.24	8.0E-98	AJ251158.1	NT	Homo sapiens partial MICB gene for MHC class I chain-related protein B, exons 2-3 and joined CDS
1562	14594	27568	1.49	8.0E-98	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1562	14594	27569	1.49	8.0E-98	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1739	14769	27754	2.73	8.0E-98	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
1739	14769	27755	2.73	8.0E-98	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3607	16652	29669	0.97	8.0E-98	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
3607	16652	29670	0.97	8.0E-98	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
3809	18849	29757	6.46	8.0E-98	J04469.1	NT	Human mitochondrial creatine kinase (CKMT) gene, complete cds
6201	19275	32509	2.74	5.0E-98	BE855873.1	EST_HUMAN	601507503F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908097 5'
2188	15203	28223	1.23	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124.3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 1B
2616	15614	28639	1.19	3.0E-98	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
2759	15751		3.63	3.0E-98	AA077498.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
7131	20107	33418	0.7	3.0E-98	9968846	NT	Homo sapiens chromosome 12 open reading frame 4 (C12ORF4), mRNA
7134	20110	33422	1.63	3.0E-98	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7134	20110	33423	1.63	3.0E-98	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
9104	22070	35496	3.59	3.0E-98	H46898.1	EST_HUMAN	yot1g09.t1 Soares adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:176240 5'
9552	22595	36043	0.65	3.0E-98	8922096	NT	Homo sapiens uncharacterized bone marrow protein BM039 (BM039), mRNA

Page 428 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10243	23168	36655	1.51	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124.3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone l8
10243	23168	36656	1.51	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124.3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone l8
10839	23759	37259	0.89	3.0E-98	BE600454.1	EST_HUMAN	601673666F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3955517 5'
11299	24249	37775	2.09	3.0E-98	U59309.1	NT	Human fumarate precursor (FH) mRNA, nuclear gene encoding mitochondrial protein, complete cds
12951	25835		1.4	3.0E-98	BE382519.1	EST_HUMAN	601297955F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628213 5'
13039	25581		2.4	3.0E-98	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
737	13798	28737	0.94	2.0E-98	BE261694.1	EST_HUMAN	601149486F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502245 5'
2092	15109	28128	3.36	2.0E-98	BE294281.1	EST_HUMAN	601172658F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528134 5'
2247	15261	28288	1.49	2.0E-98	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4325	17354	30240	0.75	2.0E-98	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4368	17395	30274	2.9	2.0E-98	4758331	NT	Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4) mRNA
4864	17881	30767	1.22	2.0E-98	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 16
4864	17881	30768	1.22	2.0E-98	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 16
5450	18552	31464	4.26	2.0E-98	770512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6811	19895	33153	1.09	2.0E-98	4503798	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
7885	20829	34206	1.08	2.0E-98	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
7885	20829	34207	1.08	2.0E-98	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
8955	21921	35347	3.8	2.0E-98	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8955	21921	35348	3.8	2.0E-98	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
9039	22005	35425	0.57	2.0E-98	L76666.1	NT	Homo sapiens NKAT4b mRNA, complete cds
9039	22005	35426	0.57	2.0E-98	L76666.1	NT	Homo sapiens NKAT4b mRNA, complete cds
9895	22848	36305	2.7	2.0E-98	X12684.1	NT	H. sapiens arginase gene exon 3 (EC 3.6.3.1)
10778	23699		1.25	2.0E-98	7705868	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
11942	24822	38418	1.58	2.0E-98	AF273048.1	NT	Homo sapiens CTCL tumor antigen sea20-9 mRNA, complete cds
405	13478	28413	23.04	1.0E-98	AI892007.1	EST_HUMAN	h36604.x1 NCL CGAP_UH Homo sapiens cDNA clone IMAGE:2261743 3' similar to SW:RL2B_HUMAN
455	13528	26458	2.12	1.0E-98	AW98611.1	EST_HUMAN	P29316 60S RIBOSOMAL PROTEIN L23A ;
							PMO-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
							w23f05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243585 5' similar to
1813	14840	27831	13.58	1.0E-98	N49818.1	EST_HUMAN	PIR:S54204 S54204 ribosomal protein L29 - human ;
5390	18493	31370	3.54	1.0E-98	AA195854.1	EST_HUMAN	zp98cd9.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628240 5' similar to TR:3606562
5849	18745	31912	1.07	1.0E-98	BE390627.1	EST_HUMAN	601284996F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606692 5'
5849	18745	31913	1.07	1.0E-98	BE390627.1	EST_HUMAN	601284996F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606692 5'

Page 429 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9350	22315	35740	5.26	1.0E-98	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
9350	22315	35741	5.26	1.0E-98	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
5917	19003	32195	0.84	9.0E-99	AI05004.1	EST_HUMAN	QV-BT073-191298-012 BT073 Homo sapiens cDNA
5917	19003	32196	0.84	9.0E-99	AI05004.1	EST_HUMAN	QV-BT073-191298-012 BT073 Homo sapiens cDNA
6158	19233	32465	3.77	9.0E-99	AW988635.1	EST_HUMAN	EST380711 MAGE resequences, MAGJ Homo sapiens cDNA
11456	24399	37946	3.71	9.0E-99	AI479828.1	EST_HUMAN	tm69h07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN
11456	24399	37947	3.71	9.0E-99	AI479828.1	EST_HUMAN	P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
11460	24403	37951	2.19	9.0E-99	BF359879.1	EST_HUMAN	tm69h07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN
11743	24628	38207	1.84	9.0E-99	AA134604.1	EST_HUMAN	P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
9078	22044	35467	1.18	8.0E-99	9835487	NT	PM2-MT0037-250700-003-G04 MT0037 Homo sapiens cDNA
5933	19019	32214	9.72	7.0E-99	AF035808.1	NT	z90d02.r1 Stragene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565443 5' similar to
11933	24814	38410	1.99	7.0E-99	AF001886.1	NT	TR:G662894 G662894 GPI-ANCHORED PROTEIN P137. ;
472	13544	28473	0.84	6.0E-99	U10991.1	NT	Human endogenous retrovirus, complete genome
4779	17789	30690	0.97	6.0E-99	4502660	NT	Homo sapiens oscillin (hLn) gene, exon 5
6752	19806	33087	0.96	6.0E-99	7706138	NT	Homo sapiens NK-receptor (KIR-G2) gene, linker region exon
5835	19888	33182	0.81	6.0E-99	L43610.1	NT	Human G2 protein mRNA, partial cds
5835	19888	33183	0.81	6.0E-99	L43610.1	NT	Homo sapiens GAP-like protein (LOC51306), mRNA
8441	21410	34823	1.06	6.0E-99	X99101.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8460	21429	34846	0.52	6.0E-99	6801589	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
9117	22083	35511	2.24	6.0E-99	AB036429.1	NT	H. sapiens mRNA for estrogen receptor
9215	22181	35612	3.79	6.0E-99	AF080255.1	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9215	22181	35613	3.78	6.0E-99	AF080255.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
9275	22241	35669	0.64	6.0E-99	11431994	NT	Homo sapiens iodester protein mRNA, complete cds
9275	22241	35670	0.64	6.0E-99	11431994	NT	Homo sapiens iodester protein mRNA, complete cds
11074	24036	37560	3.32	6.0E-99	11526299	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
11783	23938	37459	1.98	6.0E-99	9910279	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
11783	23938	37460	1.98	6.0E-99	9910279	NT	Homo sapiens BH3 interacting domain death agonist (BID), mRNA
1982	15003	28006	1.37	5.0E-99	Y11365.1	NT	Homo sapiens UDP-glucose:glycoprotein glucosyltransferase 1 (HUGT1), mRNA
4596	17617	30511	1.46	5.0E-99	AF009660.1	NT	Homo sapiens UDP-glucose:glycoprotein glucosyltransferase 1 (HUGT1), mRNA
12496	25238		5.2	5.0E-99	BE990177.1	EST_HUMAN	H. sapiens IMPA gene, exon 8
8664	21632		5.74	3.0E-99	M95586.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
							901513157F1.NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914991 5'
							Human E2A/HLA fusion protein (E2A/HLF) mRNA, complete cds

Page 430 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1244	14281		16.34	2.0E-99	AW274792.1	EST_HUMAN	XP09608.X1 NCL_CGAP_HN9 Homo sapiens cDNA clone IMAGE:2739874 3' similar to gb:M31212 MYOSIN
3272	16326	29248	1.19	2.0E-99	M30938.1	NT	LIGHT CHAIN ALKALI, NON-MUSCLE ISOFORM (HUMAN); Human Ku (p70/p80) subunit mRNA, complete cds
4574	17596	30490	1.95	2.0E-99	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7936	20878	34268	0.67	2.0E-99	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
9055	22021	35448	12.17	2.0E-99	W23507.1	EST_HUMAN	zb46d06.r1 Soares fetal lung_NbHL19W Homo sapiens cDNA clone IMAGE:306635 5' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
9507	22470	35914	0.65	2.0E-99	R78254.1	EST_HUMAN	vi81b09.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145625 5'
11440	24383	37923	2.56	2.0E-99	AF247457.2	NT	Homo sapiens myosin X (MYO10) mRNA, complete cds
315	13407	26333	1.5	1.0E-99	AF114487.1	NT	Homo sapiens intersecin long isoform (ITSN) mRNA, complete cds
379	13463	26393	1.04	1.0E-99	11526150	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
1419	14452	27426	1.98	1.0E-99	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
1559	14591	27563	1.52	1.0E-99	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1559	14591	27564	1.52	1.0E-99	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1944	14968	27965	1.18	1.0E-99	4503730	NT	Homo sapiens FK506-binding protein 6 (36kD) (FKBP6) mRNA, and translated products
1944	14968	27966	1.18	1.0E-99	4503730	NT	Homo sapiens FK506-binding protein 6 (36kD) (FKBP6) mRNA, and translated products
3101	16158	28070	1.6	1.0E-99	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
4407	17435	30320	2.26	1.0E-99	AF098018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
4407	17435	30321	2.26	1.0E-99	AF098018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
5836	18926	32110	0.59	1.0E-99	7662349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0869), mRNA
6976	20199	33528	1.77	1.0E-99	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
6976	20199	33529	1.77	1.0E-99	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
7346	25680	33682	0.61	1.0E-99	X98022.1	NT	H. sapiens E6-AP gene exon 2
9554	22516		0.86	1.0E-99	11419721	NT	Homo sapiens ALEX1 protein (LOC51309), mRNA
9878	22831	36285	1.99	1.0E-99	AW340174.1	EST_HUMAN	h02h02.x1 Soares_NFL_T_G9C_S1 Homo sapiens cDNA clone IMAGE:2808371 3' similar to TR:002711
11473	24416	37965	1.89	1.0E-99	7427514	NT	O02711 PRO-POL-DUTHPASE POLYPROTEIN ;
11473	24416	37966	1.89	1.0E-99	7427514	NT	Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA
11705	24670	38247	2.17	1.0E-99	AB023222.1	NT	Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA
12553	25079		9.09	1.0E-99	AF240786.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
1	13123	26021	1.83	1.0E-100	AL163247.2	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2	13123	26021	1.19	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
68	13187	26105	1.3	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
69	13187	26106	1.3	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
87	13203	26128	0.87	1.0E-100	AW275237.1	EST_HUMAN	XI78b1.1x1 NCL CGAP_Bms3 Homo sapiens cDNA clone IMAGE:2824805 3'
170	13272	26197	2.52	1.0E-100	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
317	13409	26335	0.96	1.0E-100	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
343	13432	26354	2.53	1.0E-100	T05087.1	EST_HUMAN	EST02975 Fetal brain, Stratagene (cat#836206) Homo sapiens cDNA clone HFBICR32
437	13511		2.36	1.0E-100	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
490	13563		4.8	1.0E-100	X89631.1	NT	G.gorilla DNA for ZNF80 gene homolog
510	13581	26502	1.4	1.0E-100	BE180609.1	EST_HUMAN	RC3-HT0625-040500-022-609 HT0625 Homo sapiens cDNA
1021	14067	27017	4.33	1.0E-100	7661885	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1021	14067	27018	4.33	1.0E-100	7661885	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1549	14582		1.23	1.0E-100	AW207555.1	EST_HUMAN	U1-HB11-afix-c-07-0.U1.s1 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722164 3'
1554	14586	27558	1.48	1.0E-100	AJ200857.1	EST_HUMAN	qf62f09.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1754633 3' similar to SW:CYT_COTJA
1881	14906	27908	0.98	1.0E-100	AB032994.1	NT	P81061 CYSTATIN 1
2254	15288		1.25	1.0E-100	D83349.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2717	15711	28728	1.98	1.0E-100	D11078.1	NT	Rat mRNA for short type PB-cadherin, complete cds
3031	16089		3.1	1.0E-100	D11078.1	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
4238	17267	30154	1.46	1.0E-100	AF057354.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
4264	17283	30172	1.94	1.0E-100	4503792	NT	Homo sapiens follicle stimulating hormone receptor (FSHR) mRNA
5127	18136	31012	3.58	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5127	18136	31013	3.58	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5362	18467	31338	1.71	1.0E-100	BF244218.1	EST_HUMAN	601863164F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4080999 5'
5586	18682	31950	0.66	1.0E-100	AW075983.1	EST_HUMAN	xa82701.x1 NCL CGAP_CML1 Homo sapiens cDNA clone IMAGE:2573305 3' similar to gb:X12433
5785	18677	32059	1.5	1.0E-100	AU118182.1	EST_HUMAN	PROTEIN PHPS1-2 (HUMAN);
5839	18929	32113	1.29	1.0E-100	AF135116.1	NT	AU118182 HEMBA1 Homo sapiens cDNA clone HEMBA1003046 5'
5837	18923	32217	0.9	1.0E-100	X14690.1	NT	Homo sapiens NF-E2-related factor 3 gene, complete cds
6287	19359	32595	0.89	1.0E-100	4557568	NT	Human mRNA for plasma inter-alpha-trypsin inhibitor heavy chain H(3)
6287	19359	32596	0.89	1.0E-100	4557568	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6576	19636		1.1	1.0E-100	572867	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6645	19703	32879	4.85	1.0E-100	AU140214.1	EST_HUMAN	Homo sapiens hest domain and RLD 2 (HERC2), mRNA
6704	19760	33039	0.61	1.0E-100	AU136800.1	EST_HUMAN	AU140214 PLACE2 Homo sapiens cDNA clone PLACE2000137 5'
							AU136800 PLACE1 Homo sapiens cDNA clone PLACE1005089 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6843	19896	33190	1.35	1.0E-100	R10887.1	EST_HUMAN	y38c08.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:129134 3'
6834	20158	33478	1.08	1.0E-100	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
7019	20145	33462	0.96	1.0E-100	AA496841.1	EST_HUMAN	ae33b05.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
7019	20145	33463	0.96	1.0E-100	AA496841.1	EST_HUMAN	ae33b06.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
7070	20092	33401	1.12	1.0E-100	BF376478.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN.;
7070	20092	33402	1.12	1.0E-100	BF376478.1	EST_HUMAN	MR1-TN0046-060900-004-b05 TN0046 Homo sapiens cDNA
7078	20099	33410	6.82	1.0E-100	X04571.1	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
7990	20929	34323	0.52	1.0E-100	U63139.1	NT	Homo sapiens Rad50 (Rad50) mRNA, complete cds
7990	20929	34324	0.52	1.0E-100	U63139.1	NT	Homo sapiens Rad50 (Rad50) mRNA, complete cds
8877	21844	35266	11.86	1.0E-100	BF103853.1	EST_HUMAN	601647357F1 NIH_MGC_61 Homo sapiens cDNA clone IMAGE:3931310 5'
8914	21880		5.3	1.0E-100	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
9368	22333	35763	0.59	1.0E-100	AU116951.1	EST_HUMAN	AU116951 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9368	22333	35764	0.59	1.0E-100	AU116951.1	EST_HUMAN	AU116951 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9588	22550	36001	3.34	1.0E-100	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9665	22822		2.44	1.0E-100	A1972388.1	EST_HUMAN	w37g09.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2489920 3' similar to contains element
9788	21111	34511	2.04	1.0E-100	AW998611.1	EST_HUMAN	MER22 repetitive element;
9842	22778		1.06	1.0E-100	AU127720.1	EST_HUMAN	PMO-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
9942	22869	36331	2.29	1.0E-100	AB046846.1	NT	AU127720 NT2RP2 Homo sapiens cDNA clone NT2RP2001918 5'
9942	22869	36332	2.29	1.0E-100	AB046846.1	NT	Homo sapiens mRNA for KIAA1626 protein, partial cds
10203	23128	36614	1.47	1.0E-100	AW630487.1	EST_HUMAN	Homo sapiens mRNA for KIAA1626 protein, partial cds
10203	23128	36615	1.47	1.0E-100	AW630487.1	EST_HUMAN	hh83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969396 5'
10364	23287	36764	0.48	1.0E-100	AV732101.1	EST_HUMAN	hh83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969396 5'
10366	23756	37256	1.94	1.0E-100	BF347519.1	EST_HUMAN	AV732101 HTF Homo sapiens cDNA clone HTFBIG01 5'
10924	23844		1.56	1.0E-100	Y10391.1	NT	602020564F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156165 5'
11111	24071	37583	7.51	1.0E-100	BF327292.1	EST_HUMAN	Human endogenous retrovirus HERV-K, pol gene
11618	24556	38118	1.78	1.0E-100	X94633.1	NT	MRO-BN0070-270300-008-h11 BN0070 Homo sapiens cDNA
11618	24556	38119	1.78	1.0E-100	X94633.1	NT	H.sapiens CD97 gene exon 4
11681	24647	38223	3.57	1.0E-100	AF111170.3	NT	H.sapiens CD97 gene exon 4
11681	24647	38224	3.57	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11712	13123	26021	1.96	1.0E-100	AL163247.2	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11989	24866		2	1.0E-100	AF268285.1	NT	Homo sapiens chromosome 21 segment HS21C047
							Homo sapiens gadin-like protein (GLP) gene, complete cds

Page 433 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12127	24996	38600	3.03	1.0E-100	AJ131034.1	NT	Homo sapiens case gene, exon 12
12128	24997	38601	1.65	1.0E-100	BE791491.1	EST_HUMAN	601586031F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3940423 5'
12177	25025	38622	15.03	1.0E-100	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12307	25851		2.32	1.0E-100	BF446549.1	EST_HUMAN	7q88h03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3' similar to TR:Q21987 Q21987
12488	25233	31799	2.58	1.0E-100	11545732	NT	COSMID R151. [2] TR:Q9UA08 ;
13084	25615	31691	8.6	1.0E-100	11417974	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
78	13195	26118	1.19	1.0E-101	7110714	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
78	13195	26119	1.19	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
687	13750	26876	2.53	1.0E-101	AB007915.2	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
705	13767	26702	6.85	1.0E-101	7110734	NT	Homo sapiens mRNA for KIAA0446 protein, partial cds
705	13767	26703	6.85	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
772	13831	26776	1.48	1.0E-101	7657454	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
854	13910	26868	2.88	1.0E-101	4503914	NT	Homo sapiens pscadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
924	13977	26929	1.22	1.0E-101	Z20656.1	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
987	14038	26994	7.23	1.0E-101	BF681218.1	EST_HUMAN	Homo sapiens of cardiac alpha-myosin heavy chain gene
1055	14101	27051	0.78	1.0E-101	A1221878.1	EST_HUMAN	602156474F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4287281 5'
1586	14619	27594	1.34	1.0E-101	5921460	NT	gg99e09.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
1586	14619	27595	1.34	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1761	14780	27776	1.12	1.0E-101	7662183	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1761	14790	27777	1.12	1.0E-101	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1962	14984	27987	1.58	1.0E-101	4502996	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
2072	15089	28107	1.07	1.0E-101	BE843070.1	EST_HUMAN	Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1) mRNA
2357	15891	28387	1.17	1.0E-101	5729892	NT	RC3-ST0281-160800-016-h09 ST0281 Homo sapiens cDNA
2622	15621	28646	5.3	1.0E-101	X72993.1	NT	Homo sapiens A kinase (PRKA) anchor protein 6 (AKAP6), mRNA
2753	15745	28763	2.07	1.0E-101	AJ237744.1	NT	H sapiens EWS gene, exon 5
2753	15745	28764	2.07	1.0E-101	AJ237744.1	NT	Homo sapiens RIBLIR gene (partial), exon 12
2967	16025		13.42	1.0E-101	AJ252312.1	NT	Homo sapiens RIBLIR gene (partial), exon 12
3216	16271	29194	1.69	1.0E-101	4885270	NT	Homo sapiens genomic downstream Rhesus box
3255	16309		2.49	1.0E-101	BF035327.1	EST_HUMAN	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
3392	16441	29367	1.73	1.0E-101	AW966556.1	EST_HUMAN	601458531F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862086 5'
3411	15745	28763	2.03	1.0E-101	AJ237744.1	NT	EST1377629 MAGI resequences, MAGI Homo sapiens cDNA
							Homo sapiens RIBLIR gene (partial), exon 12

Page 434 of 546
Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3411	15745	28764	2.03	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3890	16930	29839	4.58	1.0E-101	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
5072	18082	30963	1.54	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5072	18082	30964	1.54	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5391	18494	31371	2.08	1.0E-101	AW965139.1	EST_HUMAN	EST377212 IMAGE resequences, MAGI Homo sapiens cDNA
6118	19196	32420	3.59	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6118	19196	32421	3.59	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6853	19906	33202	1.16	1.0E-101	11430734	NT	Homo sapiens carbonic anhydrase VII (CA7), mRNA
7488	20453	33863	1.16	1.0E-101	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7542	20505	33863	4.82	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7542	20505	33864	4.82	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7717	20674	34040	7.39	1.0E-101	AW008475.1	EST_HUMAN	hw55f12x1 NCI CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2533487 3'
7826	20774		1.76	1.0E-101	BE257384.1	EST_HUMAN	601103217F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3349901 5'
7993	20932	34327	6.3	1.0E-101	BF330759.1	EST_HUMAN	RC1-BT0313-220700-018-f12 BT0313 Homo sapiens cDNA
8245	21214	34621	1.07	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345869 5'
8245	21214	34622	1.07	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345869 5'
8390	21359	34766	5.11	1.0E-101	BF029174.1	EST_HUMAN	601764686F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:3996837 5'
8665	21633	35053	0.83	1.0E-101	AW630070.1	EST_HUMAN	hh74g10.y1 NCI CGAP_GU1 Homo sapiens cDNA clone IMAGE:2968578 5' similar to gb:J03143
8665	21633	35054	0.83	1.0E-101	AW630070.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
9364	22329	35758	0.93	1.0E-101	AA036800.1	EST_HUMAN	hh74g10.y1 NCI CGAP_GU1 Homo sapiens cDNA clone IMAGE:2968578 5' similar to gb:J03143
9685	22638	36094	0.82	1.0E-101	AB037772.1	NT	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
9685	22638	36095	0.82	1.0E-101	AB037772.1	NT	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
9817	21139	34544	19.42	1.0E-101	X60069.1	NT	PIR:S54640 S54640 YD9335.03c protein - yeast ;
9817	21139	34545	19.42	1.0E-101	X60069.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
9830	22679	36135	18.13	1.0E-101	9845492	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
10115	23041	36520	13.91	1.0E-101	BE619667.1	EST_HUMAN	Human mRNA for pancreatic gamma-glutamyltransferase
10115	23041	36521	13.91	1.0E-101	BE619667.1	EST_HUMAN	Human mRNA for pancreatic gamma-glutamyltransferase
10254	23179	36866	0.61	1.0E-101	10863960	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA
10773	23694	37192	1.96	1.0E-101	11429127	NT	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
10807	23728	37229	0.56	1.0E-101	AI570293.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
							601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
							Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
							Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
							to77d11.x1 NCI CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb:M26326
							KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);

Page 435 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10807	23728	37230	0.56	1.0E-101	AI570293.1	EST_HUMAN	bt77d11.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb:M26326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
10914	23834	37349	0.64	1.0E-101	BE973648.1	EST_HUMAN	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
10914	23834	37350	0.64	1.0E-101	BE973648.1	EST_HUMAN	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
11225	24178	37705	2.38	1.0E-101	S38327.1	NT	branched-chain alpha-keto acid dehydrogenase complex E1 alpha subunit [human, Genomic, 195 nt segment 8 of 9]
12083	24955	38550	162.1	1.0E-101	AA321316.1	EST_HUMAN	EST23783 Bone marrow Homo sapiens cDNA 5' end similar to defensin 1
12735	26387		7.64	1.0E-101	AW939051.1	EST_HUMAN	QV1-DT0068-240200-085-a01 DT0068 Homo sapiens cDNA
41	13161	26084	0.73	1.0E-102	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p14K230) mRNA, complete cds
341	13430	26351	5.2	1.0E-102	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
778	13835	26781	1.07	1.0E-102	4557534	NT	Homo sapiens down-regulated in adenoma (DRA) mRNA
1119	14163	27114	1.9	1.0E-102	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1273	14308	27288	2.27	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1273	14308	27289	2.27	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1417	14450	27423	200.41	1.0E-102	BE408447.1	EST_HUMAN	601298982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3628901 5'
2318	15328	28352	1.36	1.0E-102	AI124669.1	EST_HUMAN	am60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95.;
2318	15329	28353	1.36	1.0E-102	AI124669.1	EST_HUMAN	am60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95.;
3037	16095		0.73	1.0E-102	Y13932.1	NT	Homo sapiens PRKY exon 7
3078	16135	29047	1.48	1.0E-102	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
3150	16207	29120	3.24	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
3160	16207	29121	3.24	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4260	17289	30170	1.83	1.0E-102	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
4441	17467	30366	1.95	1.0E-102	BE251310.1	EST_HUMAN	601107843F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343882 5'
5157	18167	31045	1	1.0E-102	R66488.1	EST_HUMAN	y82c04.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:140934 5'
5445	18547	31460	1.52	1.0E-102	AF067133.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 7
5842	18932		3.3	1.0E-102	AB034951.1	NT	Homo sapiens HSC54 mRNA for heat shock cognate protein 54, complete cds
5882	18971	32163	3.45	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5882	18971	32164	3.45	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5889	18977	32169	0.98	1.0E-102	11433046	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
6426	19492	32744	2.74	1.0E-102	AI459825.1	EST_HUMAN	ar82f09.x1 Barstead colon HPLR87 Homo sapiens cDNA clone IMAGE:2161785 3' similar to TR:Q13137
7283	20016	33319	0.5	1.0E-102	AW451643.1	EST_HUMAN	Q13137 NDP82.;
							UI-H-B13-aj-d-10-0-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736835 3'

Page 436 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7343	20314	33658	0.75	1.0E-102	BE729323.1	EST_HUMAN	601561505F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3831241 5'
7371	20341	33693	0.77	1.0E-102	BE386106.1	EST_HUMAN	601277219F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3818243 5'
7494	20459	33818	0.54	1.0E-102	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7578	20540	33898	8.85	1.0E-102	AJ238994.1	NT	Homo sapiens mRNA for Centaurin-alpha2 protein
7886	20830	34208	2.64	1.0E-102	AV710738.1	EST_HUMAN	AV710738 Cu Homo sapiens cDNA clone CuaAKD03 5'
8168	21106	34505	0.58	1.0E-102	10947063	NT	Homo sapiens ankryrin 2, neuronal (ANK2), transcript variant 2, mRNA
8565	21533	34953	3.61	1.0E-102	BE763051.1	EST_HUMAN	QV3-NT0026-210600-236-h08 NT0025 Homo sapiens cDNA
8645	21613	35035	0.91	1.0E-102	BE910555.1	EST_HUMAN	601501107F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3903145 5'
8839	21806	35223	1.22	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GK Homo sapiens cDNA clone GKCEEE11 5'
8839	21806	35224	1.22	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GK Homo sapiens cDNA clone GKCEEE11 5'
8950	21916	35340	0.74	1.0E-102	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9283	22249	35679	0.73	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605536 5'
9283	22249	35680	0.73	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605536 5'
9606	22610	36062	0.56	1.0E-102	A1762859.1	EST_HUMAN	w63b06.x1 NCJ_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2397971 3' similar to contains MER4.11
9636	22580	36030	0.89	1.0E-102	AV755842.1	EST_HUMAN	MER4 MER4 repetitive element;
9676	22629	36082	2.15	1.0E-102	T70393.1	EST_HUMAN	AV755842 BM Homo sapiens cDNA clone BMFAUD06 5'
9676	22629	36083	2.15	1.0E-102	T70393.1	EST_HUMAN	yd13d07.r1 Soares fetal liver spleen TNFSL Homo sapiens cDNA clone IMAGE:67021 5'
9766	22707	36163	3.86	1.0E-102	AU124629.1	EST_HUMAN	yd13d07.r1 Soares fetal liver spleen TNFSL Homo sapiens cDNA clone IMAGE:67021 5'
10748	23670	37221	0.71	1.0E-102	AF153715.1	NT	AU124629 NT2RM4 Homo sapiens cDNA clone NT2RM400309 5'
10798	23719	37222	0.43	1.0E-102	11425430	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
10798	23719	37222	0.43	1.0E-102	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
10835	23755	37254	3	1.0E-102	A1905037.1	EST_HUMAN	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
10835	23755	37255	3	1.0E-102	A1905037.1	EST_HUMAN	RC-BT074-260499-014 BT074 Homo sapiens cDNA
10896	23816	37323	1.15	1.0E-102	AA970786.1	EST_HUMAN	RC-BT074-260499-014 BT074 Homo sapiens cDNA
11410	24354	37887	2.36	1.0E-102	4507822	NT	on57h04.s1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1560823 3' similar to
11410	24354	37888	2.36	1.0E-102	4507822	NT	SW-CAV2_HUMAN P61636 CAVEOLIN-2, [1];
11732	24618	38195	2.7	1.0E-102	BF369243.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
12019	24896	38494	4.74	1.0E-102	U41302.1	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
12079	24951	38546	5.67	1.0E-102	U57053.1	NT	RC6-ET0072-150600-011-F01 ET0072 Homo sapiens cDNA
12182	25030		2.49	1.0E-102	AL163280.2	NT	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
12727	25380	31746	4.15	1.0E-102	AW300892.1	EST_HUMAN	Human unconventional myosin-ID (MYOTIF) gene, partial cds
							Homo sapiens chromosome 21 segment HS21C080
							x607c12.x1 NCJ_CGAP_Co20 Homo sapiens cDNA clone IMAGE:2666038 3'

Page 437 of 546
Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
13028	25576		1.59	1.0E-102	J05235.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
70	13188	26107	1.14	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
70	13188	26108	1.14	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
100	13216	26140	9.55	1.0E-103	D87078.2	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
209	13310	26237	4.18	1.0E-103	5453793	NT	Homo sapiens nuclear protein (KKE/D repeat) (NOP56) mRNA
982	14033	26985	1.02	1.0E-103	AJ278348.1	NT	Homo sapiens mRNA for pregnancy-associated plasma protein-E (PAPPE) gene
1248	14284	27250	16.75	1.0E-103	BE877541.1	EST_HUMAN	601485388F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3887876 5'
1600	14632	27608	2.39	1.0E-103	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
1992	15013	28018	1.4	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
1992	15013	28019	1.4	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2313	15325	28348	0.93	1.0E-103	AU134991.1	EST_HUMAN	AU134991 PLACE1 Homo sapiens cDNA clone PLACE1000965 5'
2457	15481	28484	1.66	1.0E-103	AF060568.1	NT	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
2601	15601	28622	1.07	1.0E-103	BF529379.1	EST_HUMAN	602041882F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179429 5'
2601	15601	28623	1.07	1.0E-103	BF529379.1	EST_HUMAN	602041882F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179429 5'
2627	15626	28650	1.01	1.0E-103	N32770.1	EST_HUMAN	yw91c08.s1 Soares_placenta_8to8weeks_2NbhP8to8W Homo sapiens cDNA clone IMAGE:259599 3'
3082	16139		2.5	1.0E-103	BE744722.1	EST_HUMAN	601573113F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834315 5'
3391	16440	29366	4.42	1.0E-103	AW298245.1	EST_HUMAN	UI-H-BW0-ajk-h-11-Q-UI.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733165 3'
3453	16499	29416	1.29	1.0E-103	AB040892.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
3767	16809		5.31	1.0E-103	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
3808	16848	29736	1.28	1.0E-103	AA485663.1	EST_HUMAN	ab10c12.s1 Stralagene lung (#937210) Homo sapiens cDNA clone IMAGE:840407 3' similar to contains element LTR10 repetitive element
3841	16881	29785	3.16	1.0E-103	11430876	NT	Homo sapiens neuropilin 1 (NRP1), mRNA
4029	17067	29998	2.9	1.0E-103	T23683.1	EST_HUMAN	seq340 b4HB3MA-Cot109+10-Bio Homo sapiens cDNA clone b4HB3MA-Cot109+10-Bio-7 3'
4858	17875	30763	0.83	1.0E-103	BE900203.1	EST_HUMAN	601673135F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3955953 5'
6044	19126	32332	0.96	1.0E-103	BF569527.1	EST_HUMAN	602186023F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310573 5'
6052	19133	32342	1.67	1.0E-103	AF179995.1	NT	Homo sapiens septin 2 (SEP2) mRNA, partial cds
6398	19466	32712	0.73	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6398	19466	32713	0.73	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6602	19661	32933	0.79	1.0E-103	AW954568.1	EST_HUMAN	EST366636 MAGC resequences, MAGC Homo sapiens cDNA
6602	19661	32934	0.79	1.0E-103	AW954566.1	EST_HUMAN	EST366636 MAGC resequences, MAGC Homo sapiens cDNA
6647	19705	32981	0.53	1.0E-103	10947051	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 1, mRNA
6746	25667	33081	1.28	1.0E-103	AA781442.1	EST_HUMAN	aj26e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391452 3'
6787	19842	33125	0.98	1.0E-103	AF053460.1	NT	Homo sapiens glycine receptor alpha 2 subunit (GLRA2) gene, exon 4

Page 438 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6879	19931	33229	1.47	1.0E-103	AI690071.1	EST_HUMAN	tm68b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
6879	19931	33230	1.47	1.0E-103	AI690071.1	EST_HUMAN	tm68b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
7024	18366	31276	1.73	1.0E-103	6032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
7024	18366	31276	1.73	1.0E-103	6032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
7161	18393	31237	1.62	1.0E-103	11431100	NT	Homo sapiens ribosomal protein L3-like (RPL3L), mRNA
7234	20255	33589	1.06	1.0E-103	AJ289890.1	NT	Homo sapiens KIAA0861 gene (partial), XT3 gene and LZTFL1 gene
7437	20404	33768	2.58	1.0E-103	AW965776.1	EST_HUMAN	EST377649 IMAGE resequences, MAGI Homo sapiens cDNA
7556	20519	33874	3.47	1.0E-103	BE748158.1	EST_HUMAN	601671637F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3838545 5'
8051	20988	34384	3.69	1.0E-103	AI690071.1	EST_HUMAN	tm68b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
8051	20988	34385	3.69	1.0E-103	AI690071.1	EST_HUMAN	tm68b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
8632	21600	35022	0.43	1.0E-103	T31090.1	EST_HUMAN	EST27193 Human Brain Homo sapiens cDNA 5' end similar to None
8968	21934	35359	0.92	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
8968	21934	35360	0.92	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
9051	22017	35441	1.06	1.0E-103	BF109244.1	EST_HUMAN	7160a03.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3525984 3' similar to SW:PTNF_HUMAN_Q16826 PROTEIN-TYROSINE PHOSPHATASE D1;
9463	22427	35865	2.86	1.0E-103	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9463	22427	35866	2.86	1.0E-103	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9503	22467	35908	1.13	1.0E-103	AA581086.1	EST_HUMAN	nd13c02.s1 NCI_CGAP_Ov1 Homo sapiens cDNA clone IMAGE:800162 3' similar to gb:L02426 26S PROTEASE SUBUNIT 4 (HUMAN);
9544	22507	35956	0.48	1.0E-103	AA774980.1	EST_HUMAN	ae84d12.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:970871 3' similar to gb:X03747_cds1 SODIUMPOTASSIUM-TRANSPORTING ATPASE BETA-1 (HUMAN);
10418	23340	36826	1.28	1.0E-103	Z37976.1	NT	H.sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
10459	23381	36874	1.81	1.0E-103	AW963676.1	EST_HUMAN	EST376749 IMAGE resequences, MAGH Homo sapiens cDNA
10598	23520	37012	10.03	1.0E-103	AI878956.1	EST_HUMAN	au51604.Y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518326 5' similar to TR:O15046 KIAA0338;

Page 439 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11004	23970	37494	1.64	1.0E-103	BE549706.1	EST_HUMAN	7b41f03.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3230813 3' similar to gb:M69043 MAJOR HISTOCOMPACTIBILITY COMPLEX ENHANCER-BINDING PROTEIN (HUMAN);
11085	24046	37568	3.99	1.0E-103	AI792759.1	EST_HUMAN	0102006.y5 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1522283 5' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING;
11183	24139	37672	1.99	1.0E-103	11424061	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11183	24139	37673	1.99	1.0E-103	11424061	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11341	24291		1.48	1.0E-103	BE671418.1	EST_HUMAN	7e50f08.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3285927 3' similar to gb:J05272 INOSINE-5'-MONOPHOSPHATE DEHYDROGENASE 1 (HUMAN);
11570	24509	38066	6	1.0E-103	BE885278.1	EST_HUMAN	601506347F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908147 6'
11702	24667	38244	2.59	1.0E-103	AU136283.1	EST_HUMAN	AU136283 PLACE1 Homo sapiens cDNA clone PLACE1003923 5'
11774	23929	37450	7.57	1.0E-103	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
11980	24857		1.47	1.0E-103	AB024759.1	NT	Homo sapiens TSA305 gene, exon 16
12047	24920	38516	2.25	1.0E-103	BE644611.1	EST_HUMAN	7e68a10.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3287610 3' similar to contains MER29.13 MER29 repetitive element;
12178	25026		1.88	1.0E-103	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12208	25049		1.95	1.0E-103	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12410	25183	31820	4.32	1.0E-103	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
236	13336	26260	1.65	1.0E-104	AL037549.3	EST_HUMAN	DKFZp564H1072_r1 564 (synonym: hibr2) Homo sapiens cDNA clone DKFZp564H1072 5'
238	13338	26261	1.85	1.0E-104	AL037549.3	EST_HUMAN	DKFZp564H1072_r1 564 (synonym: hibr2) Homo sapiens cDNA clone DKFZp564H1072 5'
1905	14829	27925	1.86	1.0E-104	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2203	15218	28238	2.52	1.0E-104	AA132975.1	EST_HUMAN	z022c06.s1 Stratagene colon (H937204) Homo sapiens cDNA clone IMAGE:587626 3' similar to gb:Z14116_mai CD59 GLYCOPROTEIN PRECURSOR (HUMAN);
2214	15228	28251	2.87	1.0E-104	BE744628.1	EST_HUMAN	601577460F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926438 5'
2377	15385	28408	1.02	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-f12 CT0249 Homo sapiens cDNA
2377	15385	28409	1.02	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-f12 CT0249 Homo sapiens cDNA
2444	15450	28469	2.43	1.0E-104	5031670	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2882	15941	28858	7.18	1.0E-104	M34671.1	NT	Human lymphocytic antigen CD59/ME43 mRNA, complete cds
2927	15985		2.84	1.0E-104	Y11151.1	NT	H. sapiens gene encoding phenylpyruvate tautomerase II
3277	16331	29252	0.94	1.0E-104	AU133926.1	EST_HUMAN	H. sapiens gene encoding phenylpyruvate tautomerase II
3402	16451		1.88	1.0E-104	AA319436.1	EST_HUMAN	AU133926 OVARC1 Homo sapiens cDNA clone OVARC1000936 5'
3615	16659	29577	0.9	1.0E-104	AB033102.1	NT	EST121658 Adrenal gland tumor Homo sapiens cDNA 5' end
3615	16659	29578	0.9	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3963	17003	29917	0.94	1.0E-104	AB032998.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4156	17187	30075	0.86	1.0E-104	F11745.1	EST_HUMAN	HSC31A071 normalized infant brain cDNA Homo sapiens cDNA clone c-31a07
4404	17432	30317	4.11	1.0E-104	X02761.1	NT	Human mRNA for fibronectin (FN precursor)
4639	17660	30547	1.44	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
4639	17660	30548	1.44	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
5255	18263	31132	1.02	1.0E-104	4885570	NT	Homo sapiens novel centrosomal protein RanBPM (RANBPM), mRNA
5292	18297	31158	0.93	1.0E-104	AF202314.1	NT	Homo sapiens erythropoietin (EPO) gene, exons 4 and 5 and complete cds
5292	18297	31159	0.93	1.0E-104	AF202314.1	NT	Homo sapiens erythropoietin (EPO) gene, exons 4 and 5 and complete cds
6050	19131	32338	1.44	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6050	19131	32339	1.44	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6100	19179	32398	0.99	1.0E-104	AB017332.1	NT	Homo sapiens alk3 mRNA for Aurora/Ip1-related kinase 3, complete cds
6611	19669	32945	24.48	1.0E-104	AI768797.1	EST_HUMAN	wj03b12.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145 KIAA0132 PROTEIN. ; contains element LTR7 repetitive element ;
6611	19669	32946	24.48	1.0E-104	AI768797.1	EST_HUMAN	wj03b12.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145 KIAA0132 PROTEIN. ; contains element LTR7 repetitive element ;
6805	19859	33146	0.92	1.0E-104	7708512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6973	20196	33523	1.53	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
6973	20196	33524	1.53	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
7435	20402	33756	2.14	1.0E-104	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
8944	21910	35335	0.74	1.0E-104	BF509244.1	EST_HUMAN	UJ-H-B14-acw-b-09-Q-U1.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086176 3'
9522	22485	35932	3.56	1.0E-104	BF448230.1	EST_HUMAN	nad16g11.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3365948 3'
9618	22562	36010	0.63	1.0E-104	AA682308.1	EST_HUMAN	zj98b05.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462897 3'
9639	22593		1.21	1.0E-104	174219.1	EST_HUMAN	yc83102.L1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:22440 5'
9669	22622	36073	4.58	1.0E-104	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9669	22622	36074	4.58	1.0E-104	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9796	21119	34520	4.97	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9796	21119	34521	4.97	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
10111	23037	35516	0.68	1.0E-104	AW103848.1	EST_HUMAN	xd76d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603523 3' similar to TR:Q24116
10111	23037	35517	0.68	1.0E-104	AW103848.1	EST_HUMAN	Q24116 HYPOTHEICAL 29.4 KD PROTEIN. ;
10307	23231	36714	0.62	1.0E-104	AF113514.1	NT	Q24116 HYPOTHEICAL 29.4 KD PROTEIN. ;
10453	23375	36867	3.35	1.0E-104	BE791713.1	EST_HUMAN	Homo sapiens histone acetyltransferase MORF mRNA, complete cds
10453	23375	36868	3.35	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
10765	23686	37182	1.36	1.0E-104	AV728070.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
							AV728070 HTC Homo sapiens cDNA clone HTOBYA07 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10808	23729	37231	5.11	1.0E-104	AU130765.1	EST_HUMAN	AU130765 NT2RP3 Homo sapiens cDNA clone NT2RP3001398 5'
10917	23837	37353	4.5	1.0E-104	U6635.1	NT	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25
10931	23851		0.82	1.0E-104	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11629	24567	38129	3.09	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11629	24567	38130	3.09	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11656	24592	38165	3.48	1.0E-104	BF684288.1	EST_HUMAN	602141218F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302507 5'
12988	25548		1.43	1.0E-104	BE393892.1	EST_HUMAN	601312181F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658676 5'
278	15810	26302	1.61	1.0E-105	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
425	13120	26018	9.28	1.0E-105	4505150	NT	Homo sapiens Meis1 (mouse) homolog (MEIS1) mRNA
596	13663	26576	3.89	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
596	13663	26577	3.89	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1689	14720		2.33	1.0E-105	AB020981.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
1837	14864	27862	1.47	1.0E-105	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1943	14987	27964	2.09	1.0E-105	D50918.1	NT	Human mRNA for KIAA0128 gene, partial cds
2199	18214	28234	2	1.0E-105	AA318369.1	EST_HUMAN	EST120609 Spleen I Homo sapiens cDNA 5' end similar to autoimmune antigen Ku, p70/p80 subunit
2731	15726		1.07	1.0E-105	AA584808.1	EST_HUMAN	no10d05.s1 NCI_OGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100265 3'
3018	16076		3.14	1.0E-105	AJ229041.1	NT	Homo sapiens 958 kb contig between AML1 and CBR1 on chromosome 21q22, segment 1/3
3362	16412	29338	1.11	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3362	16412	29337	1.11	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4125	17158	30048	3.14	1.0E-105	AW961688.1	EST_HUMAN	EST1373761 MAGG resequences, MAGG Homo sapiens cDNA
4773	17793	30984	0.69	1.0E-105	BE868881.1	EST_HUMAN	601446823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4773	17793	30985	0.69	1.0E-105	BE868881.1	EST_HUMAN	601446823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4783	17810	30702	1.65	1.0E-105	AA69335.1	EST_HUMAN	z144g02.s1 Scores_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:433682 3'
4976	17991		4.04	1.0E-105	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
5147	18156	31036	1.21	1.0E-105	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
5403	18506	31383	0.7	1.0E-105	AF016704.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 2
5471	18572		1.02	1.0E-105	11420134	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
7089	20023	33324	1.57	1.0E-105	BF314302.1	EST_HUMAN	601901028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
7089	20023	33325	1.57	1.0E-105	BF314302.1	EST_HUMAN	601901028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
7174	18405	31203	3.49	1.0E-105	11419196	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7174	18405	31204	3.49	1.0E-105	11419196	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7223	20245	33579	0.96	1.0E-105	AW951634.1	EST_HUMAN	EST363669 MAGG resequences, MAGG Homo sapiens cDNA
7501	20466	33827	0.89	1.0E-105	BE902816.1	EST_HUMAN	601677279F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960019 5'

Page 442 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8192	21162	34572	1.09	1.0E-105	X12556.1	NT	Human mRNA for dbi proto-oncogene
8362	21331	34743	6.09	1.0E-105	T05087.1	EST_HUMAN	EST02375 Fetal brain, Stratagene (cat#939206) Homo sapiens cDNA clone IMAGE:2500626 3' similar to
8741	21709	35132	1.52	1.0E-105	AW0007194.1	EST_HUMAN	ws50c10.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2500626 3' similar to
9280	22246	35675	0.75	1.0E-105	AW840817.1	EST_HUMAN	SW:ACSA_PENCH P36333 ACETYL-COENZYME A SYNTHETASE ;
9405	22370	35805	3.19	1.0E-105	AW016879.1	EST_HUMAN	RC1-CN0008-070100-011-e05 CN0008 Homo sapiens cDNA
9558	22520	35968	0.91	1.0E-105	AW882372.1	EST_HUMAN	UHH-BI0p-ab1-b-12.0-UI.s1 NCL_CGAP_Sub2 Homo sapiens cDNA IMAGE:2711782 3'
9558	22520	35969	0.91	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-083-d09 OT0062 Homo sapiens cDNA
9926	22810	36262	0.76	1.0E-105	BE867793.1	EST_HUMAN	QV2-OT0062-140300-083-d09 OT0062 Homo sapiens cDNA
9926	22810	36263	0.76	1.0E-105	BE867793.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
11278	24229	37756	4.59	1.0E-105	AF254822.1	NT	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
11564	24504	38061	1.61	1.0E-105	D63548.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
11611	24549	38109	2.83	1.0E-105	7705936	NT	Homo sapiens COL4A6 gene for a6(V) collagen, exon 31
11914	24795	38386	2.81	1.0E-105	AW027554.1	EST_HUMAN	Homo sapiens Ran binding protein 11 (LOC51194), mRNA
11984	24861	38457	2.56	1.0E-105	BF430921.1	EST_HUMAN	wv74f07.x1 Soares_thymus_NHFFth Homo sapiens cDNA clone IMAGE:2535301 3' similar to TR:P87892
12104	24975	38572	1.5	1.0E-105	AB004924.1	NT	P87892 PROTEASE ;
12104	24975	38573	1.5	1.0E-105	AB004924.1	NT	7c18c10.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3574291 3' similar to TR:P97680 P97680
152	13255		1.76	1.0E-106	AW503208.1	EST_HUMAN	RIN1. ;
206	13307	26235	1.59	1.0E-106	AI565085.1	EST_HUMAN	Homo sapiens gene for Smad 3, exon 2 and 3
543	13614	26534	2.23	1.0E-106	AW565556.1	EST_HUMAN	Homo sapiens gene for Smad 3, exon 2 and 3
607	13674	26589	3.07	1.0E-106	J00146.1	NT	UHH-BNO-akt-g-07-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
608	13674	26589	1.71	1.0E-106	J00146.1	NT	Iq79c01.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2215008 3'
1712	14742	27726	4.6	1.0E-106	U48724.1	NT	EST1377629 MAGE resequences, MAGI Homo sapiens cDNA
1732	14762	27746	1.01	1.0E-106	U04510.1	NT	Human dihydrofolate reductase pseudogene (psi-hd1)
1820	14947	27839	4.27	1.0E-106	AA527446.1	EST_HUMAN	Human dihydrofolate reductase pseudogene (psi-hd1)
1820	14947	27840	4.27	1.0E-106	AA527446.1	EST_HUMAN	Human epidermal growth factor receptor (EGFR) precursor-mRNA, exon 4, partial cds
2132	15149	28164	1.52	1.0E-106	BE144286.1	EST_HUMAN	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 41
2325	15336	28359	3.89	1.0E-106	4504184	NT	ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
2512	15515	28539	1.07	1.0E-106	AF003528.1	NT	LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
							LTR3 repetitive element ;
							ng41c05.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3'

Page 443 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2610	15609	28633	1.79	1.0E-106	BE260201.1	EST_HUMAN	601149783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3602461 5'
2768	18780	28782	4.05	1.0E-106	AI278526.1	EST_HUMAN	q76h10.x1 Soares_NHMPu_ST Homo sapiens cDNA clone IMAGE:1878307 3'
2838	14461	27437	1.13	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2838	14461	27438	1.13	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2886	15945	28860	0.99	1.0E-106	BE384296.1	EST_HUMAN	601272675F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3613818 5'
2952	18009	28934	4.42	1.0E-106	AB037747.1	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
2952	18009	28935	4.42	1.0E-106	AB037747.1	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
3195	18250	29168	1.72	1.0E-106	8922965	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3195	18250	29169	1.72	1.0E-106	8922965	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3454	16500	29417	1	1.0E-106	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3454	16500	29418	1	1.0E-106	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
4068	17104	29996	7.68	1.0E-106	AW974650.1	EST_HUMAN	EST386875 IMAGE resequences, MAGN Homo sapiens cDNA
4068	17104	29997	7.68	1.0E-106	AW974650.1	EST_HUMAN	EST386875 IMAGE resequences, MAGN Homo sapiens cDNA
4631	17852	30539	0.73	1.0E-106	BE144286.1	EST_HUMAN	MRO-HT0166-140200-008-010 HT0165 Homo sapiens cDNA
4934	17950	30841	0.92	1.0E-106	U31520.1	NT	Human alpha mannosidase II mRNA, complete cds
5289	18294		0.96	1.0E-106	L41644.1	NT	Homo sapiens dysitrophin gene, exon 41
5443	18545	31457	2.52	1.0E-106	AA781155.1	EST_HUMAN	ai24509.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391225 3' similar to gb:X12433 PROTEIN
5954	19039	32236	0.82	1.0E-106	AU130113	EST_HUMAN	PHPS1-2 (HUMAN);
5954	19039	32237	0.82	1.0E-106	AU130113	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
6009	19092	32292	0.56	1.0E-106	AA434168.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
6108	19187	32406	0.78	1.0E-106	AU143428	EST_HUMAN	zw28d12.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:770615 3'
6108	19187	32407	0.78	1.0E-106	AU143428	EST_HUMAN	AU143428 Y79AA1 Homo sapiens cDNA clone Y79AA1001912 5'
6221	19295	32528	19	1.0E-106	BF679574.1	EST_HUMAN	AU143428 Y79AA1 Homo sapiens cDNA clone Y79AA1001912 5'
6332	19402	32643	0.68	1.0E-106	BE897112.1	EST_HUMAN	602154012F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295067 5'
6536	19402	32643	0.62	1.0E-106	BE897112.1	EST_HUMAN	601439670F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924841 5'
6559	19619	32884	17.32	1.0E-106	11545913	NT	601439670F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924841 5'
6559	19619	32885	17.32	1.0E-106	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
7596	20557	33917	5.25	1.0E-106	AA683779.1	EST_HUMAN	Homo sapiens xylosyltransferase II (XT2), mRNA
7655	20615	33979	5.04	1.0E-106	11429617	NT	ae72e07.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:969732 3' similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
7746	20700	34066	1.17	1.0E-106	BE292722.1	EST_HUMAN	Homo sapiens XPM22 protein (LOC57109), mRNA
7869	20813	34190	8.48	1.0E-106	11425503	NT	601105739F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988345 5'
7869	20813	34191	8.48	1.0E-106	11425503	NT	Homo sapiens sorting nexin 11 (SNX11), mRNA

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8119	21056	34453	0.63	1.0E-106	AU116850.1	EST_HUMAN	AU116850 HEMBA1 Homo sapiens cDNA clone HEMBA1000129 5'
8317	21286	34699	5.05	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8317	21286	34700	5.05	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8515	21483	34997	108.87	1.0E-106	AI523066.1	EST_HUMAN	ar68a07.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2127732 3' similar to gb:X06233 CALGRANULIN B (HUMAN);
8976	21942	35366	0.76	1.0E-106	BE387950.1	EST_HUMAN	601282717F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
8976	21942	35367	0.76	1.0E-106	BE387950.1	EST_HUMAN	601282717F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
9054	22020	35445	3.3	1.0E-106	AI654123.1	EST_HUMAN	ty62a05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2283632 3' similar to SW:1CA6_HUMAN Q05084 69 KD ISLET CELL AUTOANTIGEN;
9060	22026	35449	0.53	1.0E-106	AI991109.1	EST_HUMAN	wu38c03.x1 Soares, Dieckgraefe, colon_NHCD Homo sapiens cDNA clone IMAGE:2522308 3' similar to TR:O70273 O70273 ETS HOMOLOGOUS FACTOR;
9407	22372	35807	0.87	1.0E-106	AW838831.1	EST_HUMAN	GM4-LT0059-150200-096-e08 LT0059 Homo sapiens cDNA
9502	22466	35906	2.47	1.0E-106	AA825307.1	EST_HUMAN	cc87e08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
9502	22466	35907	2.47	1.0E-106	AA825307.1	EST_HUMAN	cc87e08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
9641	22585	36034	1.55	1.0E-106	AI750447.1	EST_HUMAN	cn03a04.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_en03a04 random
9784	22725	36181	1.81	1.0E-106	AI479569.1	EST_HUMAN	tm41f02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2160699 3' similar to contains MSR1.13 TAR1 PTR5 repetitive element;
9784	22725	36182	1.81	1.0E-106	AI479569.1	EST_HUMAN	tm41f02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2160699 3' similar to contains MSR1.13 TAR1 PTR5 repetitive element;
10361	23284	36761	1.22	1.0E-106	BE389234.1	EST_HUMAN	601282367F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604217 5'
10444	23366	36856	0.92	1.0E-106	BF027310.1	EST_HUMAN	601671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
10444	23366	36857	0.92	1.0E-106	BF027310.1	EST_HUMAN	601671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
10601	23523	37017	5.46	1.0E-106	AA604417.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
10601	23523	37018	5.46	1.0E-106	AA604417.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
10648	23570	37066	1.59	1.0E-106	AW363299.1	EST_HUMAN	RC0-CT0318-201199-031-at11 CT0318 Homo sapiens cDNA
10653	23575	37071	0.5	1.0E-106	11438432	NT	Homo sapiens multimetricin (MMRN), mRNA
10653	23575	37072	0.5	1.0E-106	11438432	NT	Homo sapiens multimetricin (MMRN), mRNA
10827	23748	37249	0.49	1.0E-106	AL039886.1	EST_HUMAN	DKFZP434F0712_r1 434 (synonym: hts3) Homo sapiens cDNA clone DKFZP434F0712 5'
10944	23864	37379	3.52	1.0E-106	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11242	24195	37713	4.84	1.0E-106	BF032755.1	EST_HUMAN	601453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
11242	24195	37714	4.84	1.0E-106	BF032755.1	EST_HUMAN	601453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
11402	24346	37879	2.76	1.0E-106	J05200.1	NT	Human ryanodine receptor mRNA, complete cds
11402	24346	37880	2.76	1.0E-106	J05200.1	NT	Human ryanodine receptor mRNA, complete cds

Page 445 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11736	24622	38200	3.21	1.0E-106	BE257385.1	EST_HUMAN	601109219F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3349997 5'
12260	25763		8.02	1.0E-106	AW410405.1	EST_HUMAN	6005111.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2981644 5'
12481	25229	31796	3.58	1.0E-106	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12481	25229	31797	3.58	1.0E-106	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12687	25354		4.46	1.0E-106	BE693905.1	EST_HUMAN	RC1-CT0249-090800-024-q05 CT0249 Homo sapiens cDNA
237	13337		4.26	1.0E-107	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
264	13380		1.85	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
631	13696	26616	3.38	1.0E-107	AF155103.1	NT	Homo sapiens NY-REN-25 antigen mRNA, partial cds
814	13872	26820	2.77	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
887	13942	26900	1.31	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
970	14022	26975	12.86	1.0E-107	AF154121.1	NT	Homo sapiens sodium-dependent high-affinity dicarboxylate transporter (NADC3) mRNA, complete cds
1283	14318	27281	1.8	1.0E-107	AB032253.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1573	14808	27579	3.93	1.0E-107	BF087405.1	EST_HUMAN	QV2-HT0540-120900-358-a05 HT0540 Homo sapiens cDNA
1767	14796	27781	2.54	1.0E-107	AF136275.1	NT	Homo sapiens cathepsin Z precursor (CTSZ) gene, exon 3
1857	14883	27879	0.96	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
1857	14883	27880	0.96	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
2218	15232	28256	1.11	1.0E-107	U13729.1	NT	Human dipeptidyl peptidase IV (DP28) gene, exon 20
2370	15378	28401	1.02	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
2370	15378	28402	1.02	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
2540	15542	28566	1.12	1.0E-107	BE732460.1	EST_HUMAN	601567819F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
2540	15542	28567	1.12	1.0E-107	BE732460.1	EST_HUMAN	601567819F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
3019	16077	28997	3.8	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
3019	16077	28998	3.8	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-d03 CN0031 Homo sapiens cDNA
3116	16173	29083	3.16	1.0E-107	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
3839	16879	29782	4.78	1.0E-107	AF020871.1	NT	Homo sapiens myotubularin (MTM1) gene, exon 9
5706	18801	31878	0.56	1.0E-107	AW869038.1	EST_HUMAN	EST381115 IMAGE resequences, MAGK Homo sapiens cDNA
5965	18050	32251	3.4	1.0E-107	BE667469.1	EST_HUMAN	601442558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846494 5'
6975	20198	33527	0.56	1.0E-107	6005706	NT	Homo sapiens A kinase (PKA) anchor protein 10 (AKAP10), mRNA
7107	20041	33543	0.63	1.0E-107	11431469	NT	Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD) (GTF3C1), mRNA
7107	20041	33544	0.63	1.0E-107	11431469	NT	Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD) (GTF3C1), mRNA
7588	20549	33909	1.16	1.0E-107	AW503913.1	EST_HUMAN	UI-HF-BNO-alf-c-08-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310 5'

Page 446 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7588	20549	33910	1.18	1.0E-107	AW503913.1	EST_HUMAN	U1HF-BNO-alf-c-08-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310 5'
7773	20726	34038	1.54	1.0E-107	AI765078.1	EST_HUMAN	wh56h04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384791 3'
8004	20943	34336	0.81	1.0E-107	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
8004	20943	34337	0.81	1.0E-107	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
8078	21015	34415	0.59	1.0E-107	AW410961.1	EST_HUMAN	fr09d11.x2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2964624 5'
9742	22770	36225	1	1.0E-107	AU122469.1	EST_HUMAN	U122469 MAMMA1 Homo sapiens cDNA clone MAMMA1002433 5'
11061	24024	37548	2.92	1.0E-107	AI992850.1	EST_HUMAN	tg10d06.x1 NCI_CGAP_C11.1 Homo sapiens cDNA clone IMAGE:2108363 3' similar to SW:AACT_DICDI
11283	24243	37770	1.52	1.0E-107	LA9141.1	NT	P05095 ALPHA-ACTININ 3, NON MUSCULAR;
11308	24268	37784	2.09	1.0E-107	BF686511.1	EST_HUMAN	Homo sapiens neuroendocrine-specific protein (NSP) gene, exon 4
11651	24588	38158	4.76	1.0E-107	BE540550.1	EST_HUMAN	602123963F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281039 5'
11721	23918	37435	2.44	1.0E-107	11419701	NT	601066681F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452829 5'
11721	23918	37436	2.44	1.0E-107	11419701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
12321	25902		5.18	1.0E-107	AA001415.1	EST_HUMAN	Homo sapiens HSPC049 protein (HSPC049), mRNA
12345	25759		1.48	1.0E-107	11418318	NT	ze45e01.s1 Scores refseq N2b-4HR Homo sapiens cDNA clone IMAGE:361944 3' similar to contains THR.b1
956	14009	26932	1.66	1.0E-108	BE296042.1	EST_HUMAN	THR repetitive element;
1270	14305	27265	4.89	1.0E-108	Y18000.1	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
2091	15108	28127	1.24	1.0E-108	BF026728.1	EST_HUMAN	Homo sapiens NF2 gene
							601671914F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954939 5'
2435	15442	28460	9.44	1.0E-108	BE206694.1	EST_HUMAN	bb25b10.x1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963899 3' similar to gb:X53777 60S
3360	16410	29332	0.79	1.0E-108	AF032897.1	NT	RIBOSOMAL PROTEIN L23 (HUMAN); gb:J05277 Mouse hexokinase mRNA, complete cds (MOUSE);
3360	16410	29333	0.79	1.0E-108	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4184	17215	30102	1.13	1.0E-108	AW684438.1	EST_HUMAN	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4555	17578	30468	1.73	1.0E-108	U72961.1	NT	h12a11.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2672060 3' similar to SW:3BP1_MOUSE
4555	17578	30469	1.73	1.0E-108	U72961.1	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4842	17859	30754	1.39	1.0E-108	7661979	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4956	17971	30862	0.98	1.0E-108	AW504799.1	EST_HUMAN	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
4986	18001	30890	2.59	1.0E-108	AJ006005.1	NT	U1HF-BNO-alf-e-04-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3080166 5'
5184	18193	31068	0.71	1.0E-108	5031624	NT	Homo sapiens PSN1 gene, alternative transcript
5556	18653	31597	1.1	1.0E-108	AW384094.1	EST_HUMAN	Homo sapiens CCAA T-box-binding transcription factor (CBF2) mRNA
5605	18701	31673	2.27	1.0E-108	BE869016.1	EST_HUMAN	RC0-HT0372-241199-031-403 HT0372 Homo sapiens cDNA
							601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'

Page 447 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5605	18701	31874	2.27	1.0E-108	BE689016.1	EST_HUMAN	601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848990 5'
6036	19119		0.8	1.0E-108	AF012623.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 20
6117	19185	32419	0.92	1.0E-108	BF334851.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6262	19335	32567	6.27	1.0E-108	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6262	19335	32568	6.27	1.0E-108	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6392	19460	32706	1.22	1.0E-108	AJ133269.1	NT	Homo sapiens caveolin-1/2 locus, Conf11, D7S622, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
6494	19195	32419	0.99	1.0E-108	BF334851.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6773	19828	33110	0.87	1.0E-108	AF016706.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
6773	19828	33111	0.87	1.0E-108	AF016706.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
7365	20335	33685	5.42	1.0E-108	11431857	NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPRC5B), mRNA
7673	20631	33995	1.98	1.0E-108	4758333	NT	Homo sapiens delta-8 fatty acid desaturase (FADS2) mRNA
7718	20675	34041	1.13	1.0E-108	BE282607.1	EST_HUMAN	601113471F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3364084 5'
7749	20702	34069	0.68	1.0E-108	BF528912.1	EST_HUMAN	602043384F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4181037 5'
7749	20702	34070	0.68	1.0E-108	BF528912.1	EST_HUMAN	602043384F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4181037 5'
8149	21086	34485	0.57	1.0E-108	11422155	NT	Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
8399	21368		1.8	1.0E-108	AF083500.1	NT	Homo sapiens connective tissue growth factor-like protein precursor, mRNA, complete cds
8452	21421	34835	5.44	1.0E-108	AW408694.1	EST_HUMAN	UI-HF-BM0-ads-e-12-0-UI.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3062878 5'
8452	21421	34836	5.44	1.0E-108	AW408694.1	EST_HUMAN	UI-HF-BM0-ads-e-12-0-UI.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3062878 5'
9402	22367	35800	0.93	1.0E-108	AF203977.1	NT	Homo sapiens ETS-family transcription factor EHF (EHF) mRNA, complete cds
9441	22405	35842	0.48	1.0E-108	N44974.1	EST_HUMAN	yy35h10.r1 Soares melanocyte 2NBM Homo sapiens cDNA clone IMAGE:273283 5' similar to PIR-A45773 A45773 kelch protein, long form - fruit fly
10983	23903	37417	2.67	1.0E-108	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC634446), mRNA
11027	21040	34439	2.14	1.0E-108	BE535227.1	EST_HUMAN	601058769F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3446361 5'
11177	18353	31298	1.84	1.0E-108	Y12490.1	NT	Homo sapiens mRNA for Golgi-associated microtubule-binding protein (GMAP-210)
11602	24540	38099	3.33	1.0E-108	AW966185.1	EST_HUMAN	EST378288 MAGE resequences, MAGE Homo sapiens cDNA
11653	24590	38180	1.75	1.0E-108	AV708790.1	EST_HUMAN	AV708790 ADC Homo sapiens cDNA clone ADCAEE03 5'
11653	24590	38161	1.75	1.0E-108	AV708790.1	EST_HUMAN	AV708790 ADC Homo sapiens cDNA clone ADCAEE03 5'
11698	24653		2.05	1.0E-108	11441465	NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA
11757	24695	38265	1.6	1.0E-108	D63539.1	NT	Homo sapiens COL4A6 gene for a6(V) collagen, exon 23

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12493	25236	31800	5.14	1.0E-108	AK024447.1	NT	Homo sapiens mRNA for FLJ00037 protein, partial cds
12884	25467		11.97	1.0E-108	BF346356.1	EST_HUMAN	602018571F1 NCI_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4154297 5'
44	13164	28067	2.17	1.0E-109	AW803116.1	EST_HUMAN	IL2-JM0077-260400-079-D06 UM0077 Homo sapiens cDNA
67	13185	28104	6.88	1.0E-109	D86974.1	NT	Human mRNA for KIAA0220 gene, partial cds
220	13320	28245	1.51	1.0E-109	11422486	NT	Homo sapiens hypothetical protein FLJ1316 (FLJ1316), mRNA
229	13328	28251	1.97	1.0E-109	11438391	NT	Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA
467	13540	28465	2.2	1.0E-109	4507712	NT	Homo sapiens tetraicopeptide repeat domain 2 (TTC2) mRNA
600	13667	28581	13.45	1.0E-109	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
600	13667	28582	13.45	1.0E-109	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1014	14062	27013	0.98	1.0E-109	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1207	14246	27204	23.68	1.0E-109	M28699.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
1208	14246	27204	21.33	1.0E-109	M28699.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
1544	14577	27549	1.2	1.0E-109	BE293673.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
1544	14577	27550	1.2	1.0E-109	BE293673.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
1891	14916	27911	1.63	1.0E-109	D13643.2	NT	Homo sapiens mRNA for KIAA0018 protein, partial cds
2253	15287	28294	2.68	1.0E-109	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
2262	15276	28300	2.59	1.0E-109	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
2630	15629	28654	3.42	1.0E-109	AI022328.1	EST_HUMAN	ow95a01.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1654536 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN ;
2630	15629	28655	3.42	1.0E-109	AI022328.1	EST_HUMAN	ow95a01.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1654536 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN ;
2631	15630	28656	1.84	1.0E-109	4504206	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCATA) mRNA
3071	16128	28040	1.81	1.0E-109	N85190.1	EST_HUMAN	J2816F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J2816 5' similar to ZINC FINGER PROTEIN ZNF43
3399	16448	28374	1.33	1.0E-109	AW893192.1	EST_HUMAN	CM3-NN0009-190400-150-f10 NN0009 Homo sapiens cDNA
3399	16448	28375	1.33	1.0E-109	AW893192.1	EST_HUMAN	CM3-NN0009-190400-150-f10 NN0009 Homo sapiens cDNA
3530	16576	28499	1.66	1.0E-109	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3572	16617	28538	0.92	1.0E-109	M37928.1	NT	Homo sapiens adenosine monophosphate deaminase 1 (AMPD1) gene, exons 8-10
3572	16617	28539	0.92	1.0E-109	M37928.1	NT	Homo sapiens adenosine monophosphate deaminase 1 (AMPD1) gene, exons 8-10
3856	16896		2.3	1.0E-109	BE146144.1	EST_HUMAN	MR0-HT0209-110400-108-a04 HT0209 Homo sapiens cDNA
4171	17202	30089	4.97	1.0E-109	AI655417.1	EST_HUMAN	ts98a06.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2239330 3' similar to WP:F63A2.8 CE16100 ;
4189	17220	30107	1.33	1.0E-109	AA662274.1	EST_HUMAN	nu83ct12.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1218262 3' similar to SW:GTT2_HUMAN P30712 GLUTATHIONE S-TRANSFERASE THETA 2 ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4189	17220	30108	1.33	1.0E-109	AA692274.1	EST_HUMAN	nu93c12.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1218262 3' similar to SW:GTT2_HUMAN
4432	17459	30350	2.38	1.0E-109	4504206	NT	P30712 GLUTATHIONE S-TRANSFERASE THETA 2;
4630	17651	30538	1.42	1.0E-109	7662083	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
4958	17973	30864	0.94	1.0E-109	R15400.1	EST_HUMAN	Homo sapiens KIAA0377 gene product (KIAA0377), mRNA
5318	18424	31227	0.5	1.0E-109	AU137282.1	EST_HUMAN	ya49e06.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:593057 5'
5332	18438	31190	0.86	1.0E-109	BF673718.1	EST_HUMAN	AU137282 PLACE1 Homo sapiens cDNA clone PLAGE1006159 5'
5386	18489	31364	2.28	1.0E-109	5174822	NT	602136446F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272922 5'
5688	18783		1.49	1.0E-109	BE179356.1	EST_HUMAN	Homo sapiens placental protein 11 (serine proteinase) (P11) mRNA
6037	25651	32323	0.83	1.0E-109	BF379888.1	EST_HUMAN	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6111	18783		1.29	1.0E-109	BE179356.1	EST_HUMAN	CM1-UT0038-060900-399-h07 UT0038 Homo sapiens cDNA
6485	19550	32789	0.57	1.0E-109	M23442.1	NT	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6485	19550	32800	0.57	1.0E-109	M23442.1	NT	Human interleukin 4 (IL-4) gene, complete cds
6742	19797	33077	8.88	1.0E-109	AI221385.1	EST_HUMAN	Human interleukin 4 (IL-4) gene, complete cds
6933	20157	33477	0.52	1.0E-109	11024711	NT	gg86h08.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:1842111 3'
7145	18377	31265	0.49	1.0E-109	BE074888.1	EST_HUMAN	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
7451	20417	33772	0.93	1.0E-109	AB046811.1	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
7815	20764	34140	3.31	1.0E-109	11432574	NT	RC5-BT0580-170300-021-F08 BT0580 Homo sapiens cDNA
7817	20768	34142	5.45	1.0E-109	BF182707.1	EST_HUMAN	Homo sapiens mRNA for KIAA1591 protein, partial cds
7817	20768	34143	5.45	1.0E-109	BF182707.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
8513	21481	34895	1.37	1.0E-109	AL049784.1	NT	601809495F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
8628	21596	35017	1.08	1.0E-109	AW749130.1	EST_HUMAN	601809495F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
9004	21970		3.59	1.0E-109	AA077498.1	EST_HUMAN	Novel human gene mapping to chromosome 13
9086	22052	35474	17.25	1.0E-109	BE787540.1	EST_HUMAN	PMO-BT0340-091299-002-e05 BT0340 Homo sapiens cDNA
9086	22052	35475	17.25	1.0E-109	BE787540.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
9593	22555	36005	1.78	1.0E-109	H84860.1	EST_HUMAN	601479417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
9705	22658	36113	0.65	1.0E-109	BE397068.1	EST_HUMAN	601479417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
9705	22658	36114	0.65	1.0E-109	BE397068.1	EST_HUMAN	ys90g08.r1 Soares retina N2b5HR Homo sapiens cDNA clone IMAGE:222110 5' similar to SP:A53491
9839	22775	36230	2.5	1.0E-109	F06604.1	EST_HUMAN	A53491 BUMETANIDE-SENSITIVE NA-K-C1 COTRANSPORTER - SPIN; ;
11128	24088	37616	2.42	1.0E-109	BE540909.1	EST_HUMAN	601288760F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
11128	24088	37617	2.42	1.0E-109	BE540909.1	EST_HUMAN	HSC1E121 normalized infant brain cDNA Homo sapiens cDNA clone c-1ec12
11158	24116	37642	31.85	1.0E-109	BF694831.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3448599 5'
							601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3448599 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11459	24402	37950	1.65	1.0E-109	AU121370.1	EST_HUMAN	AU121370 HEMBB1 Homo sapiens cDNA clone HEMBB1002690 5'
11897	24662	38240	2.82	1.0E-109	4502838	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA
11735	24621	38199	5.45	1.0E-109	W16510.1	EST_HUMAN	zh08b12.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:301439 5' similar to PIR:S43969 S43969 p54-beta stress-activated protein kinases - rat;
11910	24791	38380	1.59	1.0E-109	BE045560.1	EST_HUMAN	rh23r05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2955969 3' similar to TR:Q9Z124 Q9Z124
12125	24994	38597	2.03	1.0E-109	BF339540.1	EST_HUMAN	YGR163W MRNA HOMOLOGUE, COMPLETE CDS. ;
12125	24994	38598	2.03	1.0E-109	BF339540.1	EST_HUMAN	602039003F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4186753 5'
12132	25001	38607	1.65	1.0E-109	AA490558.1	EST_HUMAN	602039003F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4186753 5'
12395	15278	28300	2.1	1.0E-109	Y17123.1	NT	ae42107.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:823621 5'
12613	15278	28300	2.24	1.0E-109	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
12720	25374	31774	1.85	1.0E-109	AB011399.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
3	13124	26022	0.89	1.0E-110	7549804	NT	Homo sapiens gene for AF-6, complete cds
39	13159	26061	4.69	1.0E-110	5803073	NT	Homo sapiens deloninase, lathyrionine, type II (DIO2), transcript variant 2, mRNA
39	13159	26062	4.69	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
109	13124	26022	1.73	1.0E-110	7549804	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
294	13388	26316	1.6	1.0E-110	D87291.1	NT	Homo sapiens deloninase, lathyrionine, type II (DIO2), transcript variant 2, mRNA
528	13589	26517	13.41	1.0E-110	U84650.1	NT	Human mRNA for inward rectifier potassium channel, complete cds
1184	14225	27181	1	1.0E-110	5031620	NT	Human dystrobrevin (DTN) gene, exon 20
1284	14319	27282	0.72	1.0E-110	AB032253.1	NT	Homo sapiens calcitonin receptor-like (GALCRL) mRNA
1937	14961	27658	1.35	1.0E-110	BE379477.1	EST_HUMAN	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
2073	15090		1.85	1.0E-110	BF508896.1	EST_HUMAN	601237545F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609883 5'
2853	15913		1.05	1.0E-110	4503098	NT	UI-HB4-acs-b-05-0-UJ.st NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
3043	14319	27282	0.88	1.0E-110	AB032253.1	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
3103	16160		1.01	1.0E-110	U78027.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
3209	16264	29185	1.55	1.0E-110	11436041	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
3209	16264	29186	1.55	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
4231	17260	30145	0.93	1.0E-110	M15918.1	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
4665	17686	30570	2.11	1.0E-110	A017213.1	EST_HUMAN	Human autoimmun antigen small nuclear ribonucleoprotein E pseudogene
4684	17705	30597	4.29	1.0E-110	AU117812.1	EST_HUMAN	ou32b10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627963 3' similar to SW-N121_RAT_P52591 NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 ;
5009	18023		1.94	1.0E-110	7662441	NT	AU117812 HEMBA1 Homo sapiens cDNA clone HEMBA1002241 5'
5367	18472	31343	2.23	1.0E-110	BE296406.1	EST_HUMAN	Homo sapiens KIAA1002 protein (KIAA1002), mRNA
							601118710F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028538 5'

Page 451 of 548
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5814	18904	32087	0.78	1.0E-110	BE621069.1	EST_HUMAN	601493677F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895795 5'
5834	18924	32108	7.66	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5834	18924	32108	7.66	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6878	25870	33228	3.64	1.0E-110	M55112.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 7
7255	20266	33580	0.59	1.0E-110	BE251486.1	EST_HUMAN	601108388F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350277 5'
7309	20280	33619	0.71	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2
7309	20280	33620	0.71	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2
7545	20508	33867	0.69	1.0E-110	AI560289.1	EST_HUMAN	bt12d08.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2167407 3' similar to SW:ETV1_HUMAN
7556	20616	33980	10.79	1.0E-110	AV714276.1	EST_HUMAN	P50549 ETS TRANSLOCATION VARIANT 1;
7556	20616	33981	10.79	1.0E-110	AV714276.1	EST_HUMAN	AV714276 DCB Homo sapiens cDNA clone DCBGC01 5'
7688	20846	34010	2.64	1.0E-110	AB020675.1	NT	AV714276 DCB Homo sapiens cDNA clone DCBGC01 5'
7820	20769	34145	1.01	1.0E-110	AU137923.1	EST_HUMAN	Homo sapiens mRNA for KIAA0868 protein, partial cds
9690	22843	36101	0.79	1.0E-110	BE302594.1	EST_HUMAN	AU137923 PLACE1 Homo sapiens cDNA clone PLACE1007511 5'
9690	22843	36101	0.79	1.0E-110	BE302594.1	EST_HUMAN	ba68f01.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905561 5' similar to TR:O77258 O77258
9696	22863	36324	3.25	1.0E-110	AW838394.1	EST_HUMAN	EG:114D9.2 PROTEIN.;
10688	23608	37102	3.4	1.0E-110	11432732	NT	QV2-LT0053-020400-119-e04 LT0053 Homo sapiens cDNA
11099	24059	37583	2.78	1.0E-110	Y12337.1	NT	Homo sapiens galactokinase 2 (GALK2), mRNA
11314	24284	37791	3.18	1.0E-110	BE734357.1	EST_HUMAN	H sapiens mRNA for myotonic dystrophy protein kinase like protein
11314	24284	37792	3.18	1.0E-110	BE734357.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
11770	23925	37445	2.49	1.0E-110	A4448529.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
12210	25051		5.81	1.0E-110	BE597218.1	EST_HUMAN	zvf67g02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781298 5' similar to TR:G1145816
12339	25137		9.66	1.0E-110	AW062258.1	EST_HUMAN	G1145816 FKBP54;
12579	25288		1.72	1.0E-110	AB011389.1	NT	601439784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924548 5'
12706	25813		2.95	1.0E-110	BF364546.1	EST_HUMAN	IL0-BT0163-040899-094-g10 BT0163 Homo sapiens cDNA
12887	15080		1.34	1.0E-110	BF508896.1	EST_HUMAN	Homo sapiens gene for AF-6, complete cds
176	13277		12.39	1.0E-111	U43701.1	NT	Homo sapiens cDNA
736	13797		3.39	1.0E-111	BF036327.1	EST_HUMAN	PM3-NN1082-140900-006-f12 NN1082 Homo sapiens cDNA
745	13806	26746	5.88	1.0E-111	8383092	NT	UI-H-B14-acs-b-05-0-U1.s1 NCJ_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
927	13980	26934	3.63	1.0E-111	M25142.1	NT	Human ribosomal protein L23a mRNA, complete cds
2250	16264	28290	1.53	1.0E-111	AF036126.1	NT	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
4357	17384	30266	4.65	1.0E-111	K02268.1	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
5293	18298	31160	0.72	1.0E-111	AB035356.1	NT	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 32 to 34

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5553	18650	31593	0.66	1.0E-111	AA151017.1	EST_HUMAN	z47b07.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:505045 5' similar to gb:M23575 PREGNANCY-SPECIFIC BETA-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
5553	18650	31594	0.66	1.0E-111	AA151017.1	EST_HUMAN	z47b07.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:505045 5' similar to gb:M23575 PREGNANCY-SPECIFIC BETA-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
5714	18608	31986	0.89	1.0E-111	BE867009.1	EST_HUMAN	60144369DF1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847655 5'
5837	18927	32111	0.49	1.0E-111	U19969.1	NT	Human two-handed zinc finger protein ZEB mRNA, partial cds
6148	19223	32463	1.5	1.0E-111	A1344679.1	EST_HUMAN	qp09g12x1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1917574 3' similar to gb:M29893 RAS-RELATED PROTEIN RAL-A (HUMAN);
6937	19890	33186	0.96	1.0E-111	AL040762.1	EST_HUMAN	DKFZp434C1815_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1815 5'
6978	20201	33631	1.3	1.0E-111	AW294648.1	EST_HUMAN	UHL-BW0-ail-4-03-0-UI.s1 NCL_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729525 3'
7405	20373	33724	0.52	1.0E-111	AW993165.1	EST_HUMAN	RC2-BN0033-160200-013-b05 BN0033 Homo sapiens cDNA
7880	20638	34000	2.57	1.0E-111	BF366228.1	EST_HUMAN	IL2-NT0101-280700-114-E03 NT0101 Homo sapiens cDNA
7772	20725	34097	0.51	1.0E-111	9961253	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant A, mRNA
7779	20732	34104	0.68	1.0E-111	AI761228.1	EST_HUMAN	wie8d01.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2398465 3' similar to gb:J04813 CYTOCHROME P450 IIIA5 (HUMAN);
7873	20817	34196	0.8	1.0E-111	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
8067	21004	34402	1.52	1.0E-111	AA133914.1	EST_HUMAN	zn62c12.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:562774 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8431	21400	34812	0.82	1.0E-111	AA278888.1	EST_HUMAN	zs79g03.r1 NCL_CGAP_GCBI Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410
8431	21400	34813	0.82	1.0E-111	AA278888.1	EST_HUMAN	zs79g03.r1 NCL_CGAP_GCBI Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410
8530	21498	34914	0.55	1.0E-111	11431896	NT	Homo sapiens protein x 0001 (LOC51185), mRNA
8583	21651	34969	3.24	1.0E-111	U66533.1	NT	Human beta4-integrin (ITGB4) gene, exon 13
9027	21993	35413	0.77	1.0E-111	11420516	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
9128	22094	35522	0.83	1.0E-111	AK024453.1	NT	Homo sapiens mRNA for FLJ00045 protein, partial cds
9160	22126		26.95	1.0E-111	BF214902.1	EST_HUMAN	601847132F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4078303 5'
9236	22202	35632	15.22	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
9236	22202	35633	15.22	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
9443	22407	35844	2.88	1.0E-111	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9672	22625	36079	0.46	1.0E-111	BF333210.1	EST_HUMAN	QY2-BT0817-270900-398-e06 BT0817 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10512	23434	36932	1.96	1.0E-111	AA504160.1	EST_HUMAN	aa58g02.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825170 3' similar to gb:L09235
10540	23462		1.69	1.0E-111	D10083.1	NT	VACUOLAR ATP SYNTHASE CATALYTIC SUBUNIT A, UBIQUITOUS (HUMAN);
10835	23557	37057	6.39	1.0E-111	AA131248.1	EST_HUMAN	Homo sapiens RGH1 gene, retrovirus-like element
11110	24070	37592	3.4	1.0E-111	AW296467.1	EST_HUMAN	z331f01.r1 Soares pregnant uterus_NHPU Homo sapiens cDNA clone IMAGE:503545 5'
11288	24238		2.64	1.0E-111	AW374340.1	EST_HUMAN	UIH-BW0-aig-d-07-0-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2730276 3'
11383	24330	37859	2.98	1.0E-111	U68159.1	NT	IL0-CT0031-221099-113-f06 CT0031 Homo sapiens cDNA
12168	25018	38618	4.77	1.0E-111	11417901	NT	Human thrombopoietin receptor (MPL) gene, exons 1,2,3,4,5 and 6
12955	18298	31160	1.75	1.0E-111	AB035356.1	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MNT1), mRNA
610	13675	26590	0.9	1.0E-112	4501854	NT	Homo sapiens mRNA for neurexin 1-alpha protein, complete cds
612	13677	26592	5.51	1.0E-112	U29103.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
612	13677	26693	5.51	1.0E-112	U29103.1	NT	Homo sapiens steroidogenic acute regulatory protein (STAR) gene, exon 5
633	13698	26618	1.91	1.0E-112	BF509039.1	EST_HUMAN	Human steroidogenic acute regulatory protein (STAR) gene, exon 5
633	13698	26619	1.91	1.0E-112	BF509039.1	EST_HUMAN	UIH-BI4-act-g-04-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1003	14054	27006	1.21	1.0E-112	AF157823.1	NT	UIH-BI4-act-g-04-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1063	14109	27058	1.85	1.0E-112	P52742	SWISSPROT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1692	14722	27703	3.1	1.0E-112	7662125	NT	ZINC FINGER PROTEIN 135
1692	14722	27704	3.1	1.0E-112	7662125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2207	15222	28242	1.08	1.0E-112	A1766925.1	EST_HUMAN	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2515	15518	28541	1.34	1.0E-112	BE866859.1	EST_HUMAN	wi90f06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400611 3'
3094	16152		3.53	1.0E-112	4504116	NT	801442674F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3846858 5'
3371	16421	28346	1.07	1.0E-112	A1828511.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3898	18938	29849	0.69	1.0E-112	BE076073.1	EST_HUMAN	wk45b12.x1 NCI_CGAP_Pr22 Homo sapiens cDNA clone IMAGE:2418335 3' similar to gb:M81650_ma1
4634	17655	30542	0.79	1.0E-112	4504116	NT	SEMNOCGELIN 1 PROTEIN PRECURSOR (HUMAN);
4784	17803	30694	5.01	1.0E-112	AB037832.1	NT	MR2-BT0590-090300-113-f09 BT0590 Homo sapiens cDNA
4784	17803	30695	5.01	1.0E-112	AB037832.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5750	18844	32027	38.43	1.0E-112	N46046.1	EST_HUMAN	Homo sapiens mRNA for KIAA1411 protein, partial cds
6195	19269	32504	1.28	1.0E-112	AF149773.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
6268	19341	32573	0.89	1.0E-112	AW502437.1	EST_HUMAN	Homo sapiens mRNA for KIAA1411 protein, partial cds
6268	19341	32574	0.89	1.0E-112	AW502437.1	EST_HUMAN	y95d07.r1 Soares melanocyte 2NbhM Homo sapiens cDNA clone IMAGE:273229 5'
6378	19446	32887	0.9	1.0E-112	BE741666.1	EST_HUMAN	UIH-F-BR0p-als-g-06-0-U1.r1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3075658 5'
6603	19682	32935	0.83	1.0E-112	BF672815.1	EST_HUMAN	UIH-F-BR0p-als-g-06-0-U1.r1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3075658 5'
6792	19846	33130	0.74	1.0E-112	BE273103.1	EST_HUMAN	601594717F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948557 5'
							602152649F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293420 5'
							601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506508 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6792	19846	33131	0.74	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506508 5'
7018	20144	33461	1.23	1.0E-112	BF674235.1	EST_HUMAN	602131405F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4270921 5'
7362	20332	33682	0.66	1.0E-112	AL043289.1	EST_HUMAN	DKFZp434M0523_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434M0523 5'
7559	20522	33879	1.62	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7559	20522	33880	1.62	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8535	21503	34921	1.93	1.0E-112	AU118051.1	EST_HUMAN	AU118051 HEMBA1 Homo sapiens cDNA clone HEMBA1002773 5'
9309	22274	33705	2.56	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847285 5'
9309	22274	33706	2.56	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847285 5'
10253	23178	36685	2.18	1.0E-112	BF111413.1	EST_HUMAN	730g07.x1 Sceres_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523020 3' similar to
11132	24092	37621	2.93	1.0E-112	AW863327.1	EST_HUMAN	TR:Q9VWV35 Q9VWV35 CG8743 PROTEIN.;
11295	24245	37772	2.35	1.0E-112	AJ249600.1	NT	MR3-SN009-100400-106-b12 SN009 Homo sapiens cDNA
11433	24377	37917	1.7	1.0E-112	BE280479.1	EST_HUMAN	Homo sapiens mRNA for secreted modular calcium-binding protein (smoc1 gene)
11518	24459	38009	3.58	1.0E-112	AW377670.1	EST_HUMAN	601155323F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138889 5'
12095	24966	38563	6.59	1.0E-112	M20707.1	NT	PMO-CT0237-141089-001-h02 CT0237 Homo sapiens cDNA
744	13805	26744	5.37	1.0E-113	AI365586.1	EST_HUMAN	Human kappe-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
744	13805	26745	5.37	1.0E-113	AI365586.1	EST_HUMAN	ac95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
941	13994	26846	5.76	1.0E-113	M11965.1	NT	Human X-linked phosphoglycerate kinase gene, exon 8
1543	14578	27548	3.01	1.0E-113	AI365586.1	EST_HUMAN	ac95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
1956	15821	27980	1.29	1.0E-113	AF240775.1	NT	Homo sapiens eIF4E-transporter mRNA, complete cds
2106	15123	28143	0.99	1.0E-113	BF516218.1	EST_HUMAN	UI-H-BW1-ani-f-03-0-UI.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082876 3'
3147	16204	29118	1.16	1.0E-113	AJ223948.1	NT	Homo sapiens mRNA for putative RNA helicase, 3' end
5316	25748		1.54	1.0E-113	BE780658.1	EST_HUMAN	601469465F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872536 5'
5570	18687	31626	6.68	1.0E-113	AU127214.1	EST_HUMAN	AU127214 NT2RP2 Homo sapiens cDNA clone NT2RP2000807 5'
5916	19002	32193	0.54	1.0E-113	BE789172.1	EST_HUMAN	601476296F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3879406 5'
5916	19002	32194	0.54	1.0E-113	BE789172.1	EST_HUMAN	601476296F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3879406 5'
6031	19114	32317	4.18	1.0E-113	AU140291.1	EST_HUMAN	AU140291 PLACE2 Homo sapiens cDNA clone PLACE2000274 5'
6061	19142	32364	0.97	1.0E-113	AF016535.1	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
6188	19263	32499	2.42	1.0E-113	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6280	19352	32587	0.62	1.0E-113	9961249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6280	19352	32588	0.62	1.0E-113	9961249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6449	19514	32764	0.89	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
6449	19514	32765	0.89	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7543	20506	33855	0.72	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
7543	20506	33856	0.72	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
9450	22414	35850	2.93	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627654 5'
9450	22414	35851	2.93	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627654 5'
9756	22697	36599	0.7	1.0E-113	BE772967.1	EST_HUMAN	RC1-FT0134-280600-021-002 FT0134 Homo sapiens cDNA
10190	23115	36599	1.3	1.0E-113	11429367	NT	Homo sapiens transmembrane protein 2 (TMEM2), mRNA
10290	23215	36599	0.73	1.0E-113	M21535.1	NT	Human erg protein (ets-related gene) mRNA, complete cds
10410	23332	36817	0.77	1.0E-113	5453997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10410	23332	36818	0.77	1.0E-113	5453997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
11457	24400	37948	1.51	1.0E-113	AW600519.1	EST_HUMAN	U1-HF-BN0-ek1-b-12-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077326 5'
11468	24409	37956	3	1.0E-113	AW630291.1	EST_HUMAN	hh81a09.y1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969176 5' similar to TR:O60327 O60327
11468	24409	37957	3	1.0E-113	AW630291.1	EST_HUMAN	hh81a09.y1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969176 5' similar to TR:O60327 O60327
11592	24530	38087	2.94	1.0E-113	BE292968.1	EST_HUMAN	KIAA0584 PROTEIN ;
11828	24709	38292	3.1	1.0E-113	AA580720.1	EST_HUMAN	601105529F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988366 5'
11828	24709	38293	3.1	1.0E-113	AA580720.1	EST_HUMAN	nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
60	13179	26092	0.65	1.0E-114	Y17151.2	NT	P39748 FLAP ENDONUCLEASE-1 ;
60	13179	26093	0.65	1.0E-114	Y17151.2	NT	nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
60	13179	26094	0.65	1.0E-114	Y17151.2	NT	P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'
							P39748 FLAP ENDONUCLEASE-1 ;
							nc80b003.r1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988366 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1681	14713	27691	5.92	1.0E-114	6679073	NT	Homo sapiens nucleoporin-like protein 1 (NLP_1), mRNA
3148	16205	29119	2.91	1.0E-114	X04086.1	NT	Human gene for catalase (EC 1.11.1.6) exon 2 mapping to chromosome 11, band p13
3187	16242	29160	1.26	1.0E-114	BF206374.1	EST_HUMAN	60186932F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100214 5'
4044	17082	29980	1.25	1.0E-114	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
4417	17444	30335	0.78	1.0E-114	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
5228	18236	31110	0.99	1.0E-114	AA194468.1	EST_HUMAN	z005e05.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628632 5' similar to contains MER22.13 MER22 repetitive element;
5474	18575	31483	1.47	1.0E-114	4506880	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
5474	18575	31484	1.47	1.0E-114	4506880	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
5676	18771	31943	1	1.0E-114	9267201	NT	Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), transcript variant 2, mRNA
6354	19423	32665	0.51	1.0E-114	Z26298.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 20
7191	18422	31224	0.54	1.0E-114	4759163	NT	Homo sapiens sparco/osteonectin, cwcv and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
7280	20014		1.01	1.0E-114	AB041533.1	NT	Homo sapiens HGMGT-1 mRNA for sperm antigen, complete cds
7450	20416	33770	1.08	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7450	20416	33771	1.08	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7499	20464	33824	5.66	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
7499	20464	33825	5.66	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
8223	21192	34600	1.87	1.0E-114	4557600	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2) mRNA
8507	21475	34888	1.65	1.0E-114	A1363139.1	EST_HUMAN	qy88d06.x1 NC1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2017163 3'
8607	21475	34889	1.65	1.0E-114	A1363139.1	EST_HUMAN	qy88d06.x1 NC1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2017163 3'
9049	22016	35439	3.38	1.0E-114	U63041.1	NT	Human neural cell adhesion molecule CD56 mRNA, complete cds
9119	22085	35514	5.81	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
9119	22085	35515	5.81	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
9353	22318	35744	0.42	1.0E-114	AB046784.1	NT	Homo sapiens mRNA for KIAA1564 protein, partial cds
9537	22500	35948	0.61	1.0E-114	BF109832.1	EST_HUMAN	7169g12.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3528847 3' similar to TR:09UH-N6 Q9UHN6 TRANSMEMBRANE PROTEIN 2 ;
9769	22710		14.09	1.0E-114	AW327455.1	EST_HUMAN	dq03f05.x1 NIH_MGC_2 Homo sapiens cDNA clone IMAGE:2846744 5'
9818	21140	34546	3.34	1.0E-114	AF077754.1	NT	Homo sapiens tyrosine kinase pp60c-src (SRC) gene, exon 12 and partial cds
9906	22858		1.15	1.0E-114	M13538.1	NT	Human ceruloplasmin mRNA
10498	23420	36919	0.95	1.0E-114	BE870004.1	EST_HUMAN	601449762F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3853600 5'
10522	23444	36942	1.42	1.0E-114	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027

Page 457 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10907	23827	37340	0.87	1.0E-114	BE171984.1	EST_HUMAN	MRO-HT0559-250200-002-d07 HT0559 Homo sapiens cDNA
11140	24100						ba73g12.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2806086 5' similar to gb:X17208 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
11524	24465	38018	15.04	1.0E-114	BE302686.1	EST_HUMAN	AV733454 cda4 Homo sapiens cDNA clone cdABA08 5'
11524	24465	38019	3.01	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda4 Homo sapiens cDNA clone cdABA08 5'
12619	25974		2.9	1.0E-114	11418041	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
12859	25464	31725	3.55	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
12859	25464	31726	3.55	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
24	13144	26044	2.83	1.0E-115	4758111	NT	Homo sapiens HLA-B associated transcript-1 (D6S81E) mRNA
130	13235	26165	2.37	1.0E-115	4505933	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
134	13239		3.38	1.0E-115	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
292	13368	26313	5.22	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-156-b08 UM0094 Homo sapiens cDNA
537	13608	26526	1.12	1.0E-115	AI339206.1	EST_HUMAN	q106f01.x1 NCL_CGAP_G04 Homo sapiens cDNA clone IMAGE:1946809 3' similar to TR:O00538 O00538 TTF-1 INTERACTING PEPTIDE 5;
537	13608	26527	1.12	1.0E-115	AI339206.1	EST_HUMAN	q106f01.x1 NCL_CGAP_G04 Homo sapiens cDNA clone IMAGE:1946809 3' similar to TR:O00538 O00538 TTF-1 INTERACTING PEPTIDE 6;
787	13846	26792	0.78	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
787	13846	26793	0.78	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
788	13848	26795	66.69	1.0E-115	4503794	NT	Homo sapiens ferritin, heavy polypeptide 1 (FTH1) mRNA
1561	14593	27566	1.46	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1561	14593	27567	1.46	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1858	14884	27881	1.24	1.0E-115	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2863	15923		1.7	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-156-b08 UM0094 Homo sapiens cDNA
3132	16189	29099	2.74	1.0E-115	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3132	16189	29100	2.74	1.0E-115	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3486	16532	29457	2.07	1.0E-115	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
4072	17108	30002	4.75	1.0E-115	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4295	17324	30204	0.86	1.0E-115	AL137163.1	NT	Novel human gene mapping to chromosome X
4429	17456	30347	3.89	1.0E-115	6912659	NT	Homo sapiens sir2-like 3 (SIRT3), mRNA
4485	17491	30378	3.73	1.0E-115	4758279	NT	Homo sapiens Epha4 (EPHA4) mRNA
4702	17723	30616	2.53	1.0E-115	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4702	17723	30617	2.53	1.0E-115	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes

Page 458 of 546
Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4943	17959	30849	2.57	1.0E-115	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
4943	17959	30850	2.57	1.0E-115	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
5420	18523	31407	9.81	1.0E-115	AW970335.1	EST_HUMAN	EST382416 IMAGE:2519568 3' similar to gb.L07807
5498	18598	31510	1.06	1.0E-115	BF685387.1	EST_HUMAN	602119348F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276738 5'
5620	18716	31875	1.68	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
5620	18716	31876	1.68	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC83433), mRNA
5775	18867	32049	1.1	1.0E-115	AI928789.1	EST_HUMAN	au64g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519568 3' similar to gb.L07807
5775	18867	32050	1.1	1.0E-115	AI928789.1	EST_HUMAN	DYNAMIN-1 (HUMAN);
6391	19459	32704	0.68	1.0E-115	11426788	NT	Homo sapiens sperm surface protein (HSS), mRNA
6391	19459	32705	0.68	1.0E-115	11426788	NT	Homo sapiens sperm surface protein (HSS), mRNA
6535	19598	32861	19.47	1.0E-115	11426038	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC83436), mRNA
6678	19735	33010	1.82	1.0E-115	7681883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6678	19735	33011	1.82	1.0E-115	7681883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
7120	20054	33358	0.57	1.0E-115	T86774.1	EST_HUMAN	yd86h08.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115095 5' similar to SP-DPOG_YEAST P15801 DNA POLYMERASE GAMMA ;
7493	20458	33816	1.22	1.0E-115	AI076598.1	EST_HUMAN	oz31a06.x1 Scores total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1876914 3'
7493	20458	33817	1.22	1.0E-115	AI076598.1	EST_HUMAN	oz31a06.x1 Scores total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1876914 3'
7638	20598	33962	7.12	1.0E-115	AB023212.1	NT	Homo sapiens mRNA for KIAA0995 protein, partial cds
8500	21468	34884	11.55	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8500	21468	34885	11.55	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8164	22130	35557	4.68	1.0E-115	11434772	NT	Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA
10133	23059	36536	0.64	1.0E-115	BF382029.1	EST_HUMAN	601816352F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4050108 5'
10358	23282	36758	1.74	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
10358	23282	36759	1.74	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
10887	23807	37312	1.02	1.0E-115	AI221878.1	EST_HUMAN	gg99a09.x1 Scores NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10887	23807	37313	1.02	1.0E-115	AI221878.1	EST_HUMAN	gg99a09.x1 Scores NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10894	23814	37321	0.7	1.0E-115	AI524987.1	EST_HUMAN	1h12a07.x1 NCI CGAP_C111 Homo sapiens cDNA clone IMAGE:218036 3' similar to TR:O16128 O16129
10920	23840	37356	0.73	1.0E-115	BE886295.1	EST_HUMAN	PHENYLALANYL TRNA SYNTHETASE ;
11072	24034	37558	3.4	1.0E-115	AW571544.1	EST_HUMAN	601509879F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911610 5'
							xx32f08.x1 NCI CGAP_U11 Homo sapiens cDNA clone IMAGE:2639239 3' similar to SW:CAYP_CANFA
							P10463 CALCYPHOSINE ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11589	24527	38083	2.1	1.0E-115	BE045890.1	EST_HUMAN	h94c10.x1 NCL_CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378 PRP4 PROTEIN KINASE HOMOLOG ;
11589	24527	38084	2.1	1.0E-115	BE045890.1	EST_HUMAN	h94c10.x1 NCL_CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378 PRP4 PROTEIN KINASE HOMOLOG ;
11726	24612	38189	2.06	1.0E-115	4502528	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12191	25036		1.52	1.0E-115	AF240786.1	NT	601121347F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2988875 5'
574	13643	26557	1.02	1.0E-116	BE275502.1	EST_HUMAN	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
801	13860	26807	2.44	1.0E-116	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
860	13916		0.66	1.0E-116	4507334	NT	Homo sapiens pericentriin (PCNT) mRNA
2013	15034	28044	2.89	1.0E-116	5174478	NT	Homo sapiens pericentriin (PCNT) mRNA
2013	15034	28045	2.89	1.0E-116	5174478	NT	Homo sapiens pericentriin (PCNT) mRNA
2316	15327	28350	1.86	1.0E-116	5453941	NT	Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
2348	15357		1.68	1.0E-116	U78308.1	NT	Human olfactory receptor pseudo_olfr17-201-1 (OR17-201-1) gene, olfactory receptor olfr17-32 (OR17-32) gene and olfactory receptor pseudo_olfr17-01 (OR17-01) pseudogene, complete cds
2462	15466	28489	2.99	1.0E-116	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2744	15829	28754	3.32	1.0E-116	BE889256.1	EST_HUMAN	601513337F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914600 5'
3180	16235		0.95	1.0E-116	T07515.1	EST_HUMAN	EST03405 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBK28 similar to EST containing L1 repeat
3189	16244	29161	5.44	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
3189	16244	29162	5.44	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
4405	17433	30318	2.36	1.0E-116	5031954	NT	Homo sapiens sodium phosphate transporter 3 (NPT3) mRNA
4892	17909	30798	2.03	1.0E-116	AI907096.1	EST_HUMAN	PM-BT135-070499-016 BT135 Homo sapiens cDNA
5230	18238	31111	0.92	1.0E-116	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
5351	18456	31326	0.92	1.0E-116	AI302062.1	EST_HUMAN	q119d04.x1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1888695 3' similar to contains element MER25 repetitive element ;
6090	19169	32384	2.18	1.0E-116	W42822.1	EST_HUMAN	zc24d07.r1 Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:323245 5' similar to SW:MDHM_MOUSE P08249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR ;
6336	19405	32845	1.8	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
6336	19405	32846	1.8	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
6408	19476	32723	0.95	1.0E-116	BE408097.1	EST_HUMAN	601302281F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636764 5'
6849	19707	32982	0.73	1.0E-116	5729867	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
6849	19707	32983	0.73	1.0E-116	5729867	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6663	19720		2.06	1.0E-116	BE158133.1	EST_HUMAN	MR2-H10379-210200-102-b04 HT0379 Homo sapiens cDNA
7130	20106	33417	1.59	1.0E-116	C02944.1	EST_HUMAN	C02944 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHG0567
7410	20377	33728	7.19	1.0E-116	AV716314.1	EST_HUMAN	AV716314 D08 Homo sapiens cDNA clone DOBBG06 5'
8712	21680	35108	1.32	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
8712	21680	35107	1.32	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
8824	21791	35213	1.04	1.0E-116	AI904151.1	EST_HUMAN	CM-BT043-090299-075 BT043 Homo sapiens cDNA
9290	22256	35686	1.39	1.0E-116	BE655507.1	EST_HUMAN	601338268F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3680680 5'
9455	22419	35857	2.9	1.0E-116	AI216352.1	EST_HUMAN	q109c05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844168 3' similar to gb:X53741_rnat1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
10033	22960	36428	1.49	1.0E-116	11418646	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2), mRNA
10633	23555	37055	0.71	1.0E-116	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene)
10633	23555	37056	0.71	1.0E-116	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene)
10713	23635	37128	0.91	1.0E-116	BE169913.1	EST_HUMAN	QV4-H10401-281299-063-c09 HT0401 Homo sapiens cDNA
11046	24010	37536	2.44	1.0E-116	BF335849.1	EST_HUMAN	CM2-CT0482-300800-349-e06 CT0482 Homo sapiens cDNA
11470	24413	37962	2.63	1.0E-116	AI367140.1	EST_HUMAN	qq41e04.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1935102 3' similar to WP:50495.7 CE01765 ;
12904	25840		1.66	1.0E-116	AL134889.1	EST_HUMAN	DKFZp762L1110_r1 762 (synonym: hmd2) Homo sapiens cDNA clone DKFZp762L1110 5'
560	13630	26547	1.04	1.0E-117	4826636	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
1079	15859	27076	0.86	1.0E-117	AF124393.1	NT	Mus musculus fragile-X-related protein 1 (Fxr1h) gene, exons 13a through 15
1229	14267	27224	2.2	1.0E-117	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1848	14874	27870	2.04	1.0E-117	M19816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
2221	15235	28259	1.26	1.0E-117	AW957699.1	EST_HUMAN	EST369769 MAGE resequences, MAGE Homo sapiens cDNA
3281	16335	29255	1.51	1.0E-117	AA978114.1	EST_HUMAN	op32c11.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1578548 3'
4016	17055	29958	5.89	1.0E-117	AA316723.1	EST_HUMAN	EST198414 HCC cell line (malastasis to liver in mouse) Homo sapiens cDNA 5' end similar to ribosomal protein L29
4371	17398	30278	2.1	1.0E-117	8659584	NT	Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), mRNA
4608	17629	30521	1.95	1.0E-117	AL042120.1	EST_HUMAN	DKFZp434C1120_r1 434 (synonym: hias3) Homo sapiens cDNA clone DKFZp434C1120 5'
4755	17775	30670	1.19	1.0E-117	X89670.1	NT	H. sapiens mRNA for TPCR16 protein
4755	17775	30671	1.19	1.0E-117	X89670.1	NT	H. sapiens mRNA for TPCR16 protein
4847	17864	30757	10.31	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
4847	17864	30758	10.31	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
4977	17992	30881	4.01	1.0E-117	AB020673.1	NT	Homo sapiens mRNA for KIAA0996 protein, complete cds
5421	18524	31402	3.29	1.0E-117	BE730508.1	EST_HUMAN	601562657F1 NIH_MGC 20 Homo sapiens cDNA clone IMAGE:3832214 5'
7148	18380	31269	0.53	1.0E-117	AA323348.1	EST_HUMAN	EST26111 Cerebellum II Homo sapiens cDNA 5' end similar to zinc finger domain

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7683	20641	34004	4.55	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7683	20641	34005	4.55	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7795	20747	34121	3.71	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
7795	20747	34122	3.71	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
							wp86507.x1 NC1 CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2468629 3' similar to TR:O75065
8311	21280	34691	3.79	1.0E-117	A1950145.1	EST_HUMAN	O75065 KIAA0477 PROTEIN ;
8654	21622	35042	1.01	1.0E-117	10834989	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8654	21622	35043	1.01	1.0E-117	10834989	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8754	21722	35144	0.63	1.0E-117	A1904151.1	EST_HUMAN	CM-BT043-090299-075 BT043 Homo sapiens cDNA
8754	21722	35145	0.63	1.0E-117	A1904151.1	EST_HUMAN	CM-BT043-090299-075 BT043 Homo sapiens cDNA
9654	22597	36046	1.61	1.0E-117	D16524.1	NT	Human gene for very low density lipoprotein receptor, exon 11
10145	23071	36546	1.71	1.0E-117	BE733922.1	EST_HUMAN	601568317F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843748 5'
10306	25701	36713	0.64	1.0E-117	AF099033.1	NT	Homo sapiens gamma-aminobutyric acid type B receptor 2 (GABBR2), mRNA, complete cds
10934	23854	37370	1.96	1.0E-117	11420222	NT	Homo sapiens Drosophila Kelch like protein (DKELCHL), mRNA
11207	24161	37891	2.17	1.0E-117	D83778.1	NT	Human mRNA for KIAA0191 gene, partial cds
11375	24322	37850	1.96	1.0E-117	11424835	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11375	24322	37851	1.96	1.0E-117	11424835	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11604	24542	38101	2.72	1.0E-117	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11604	24542	38102	2.72	1.0E-117	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11722	24608		34.45	1.0E-117	BE268656.1	EST_HUMAN	601186203F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3544298 5'
11921	24802	38393	1.76	1.0E-117	4507848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11921	24802	38394	1.76	1.0E-117	4507848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
							Homo sapiens mannose 6-phosphate isomerase, complete cds
12429	25911		1.39	1.0E-117	AF224689.1	NT	(UBE2D3) genes, complete cds
71	13189	26109	2.9	1.0E-118	AF161500.1	NT	Homo sapiens HSPC151 mRNA, complete cds
95	13211	26135	1.27	1.0E-118	AL049584.1	EST_HUMAN	DKFZp434i056_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434i056 5'
518	13589	26509	4.46	1.0E-118	7657016	NT	Homo sapiens hypophthalmin protein (D1328E19 C1.1), mRNA
915	15854	26923	1.66	1.0E-118	5174690	NT	Homo sapiens sine oculis homeobox (Drosophila) homolog 1 (SIX1) mRNA
2242	15256	28280	1.93	1.0E-118	BE388705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2242	15256	28281	1.93	1.0E-118	BE388705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2242	15256	28282	1.93	1.0E-118	BE388705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2337	15348		1.55	1.0E-118	AW951729.1	EST_HUMAN	EST363799 IMAGE:3604019 5'
2750	15743	28760	2.48	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
2750	15743	28761	2.48	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds

Page 462 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3121	16178		3.87	1.0E-118	Y13932.1	NT	Homo sapiens PRKY exon 7
3210	16265	29187	4.61	1.0E-118	AI347694.1	EST_HUMAN	qp01f05.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916769 3'
3210	16265	29188	4.61	1.0E-118	AI347694.1	EST_HUMAN	qp01f05.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916769 3'
3970	17010	29924	0.98	1.0E-118	AB024469.1	NT	Pongo pygmaeus DNA, similar to pol gene of HERV-W and MSRV, isolate ORW3-3
4116	17149	30041	5.07	1.0E-118	D23660.1	NT	Human mRNA for ribosomal protein, complete cds
5497	18597	31508	1.86	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5497	18597	31509	1.86	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5713	18807	31984	0.66	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5713	18807	31985	0.66	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5800	18892	32074	0.58	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5800	18892	32075	0.58	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5865	18954	32141	1.44	1.0E-118	M55109.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 4
5962	19047	32247	0.95	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
5962	19047	32248	0.95	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
6053	19134	32343	1.81	1.0E-118	11420764	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6849	19902	33196	1.79	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
6849	19902	33197	1.79	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7304	20275	33611	1.07	1.0E-118	AL043761.1	EST_HUMAN	DKFZp434O0127_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434O0127 5'
7304	20275	33612	1.07	1.0E-118	AL043761.1	EST_HUMAN	DKFZp434O0127_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434O0127 5'
7858	20803	34179	5.13	1.0E-118	11431050	NT	Homo sapiens chromosome 2 open reading frame 3 (C2ORF3), mRNA
7872	20916	34194	0.72	1.0E-118	L46590.1	NT	Homo sapiens very long chain acyl-CoA dehydrogenase gene, exons 1-20, complete cds
8305	21274	34585	2.41	1.0E-118	BE781223.1	EST_HUMAN	601469159F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872247 5'
8726	21694	35119	7.01	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-090200-097-h03 BT0263 Homo sapiens cDNA
8726	21694	35120	7.01	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-090200-097-h03 BT0263 Homo sapiens cDNA
8732	21700	35125	1.39	1.0E-118	AA443024.1	EST_HUMAN	z88407.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8732	21700	35126	1.39	1.0E-118	AA443024.1	EST_HUMAN	z88407.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
9021	21987	35408	1.02	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
9021	21987	35409	1.02	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
9071	22037	35460	1.32	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
9071	22037	35461	1.32	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
9390	22355	35786	5.12	1.0E-118	BE263134.1	EST_HUMAN	601144863F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160502 5'
9421	22386	35825	0.53	1.0E-118	AL048474.2	EST_HUMAN	DKFZp586K1824_r1 586 (synonym: hute1) Homo sapiens cDNA clone DKFZp586K1824
9851	22878	36341	2.29	1.0E-118	7657016	NT	Homo sapiens hypothetical protein (D328E19.C1.1), mRNA
10698	23620	37115	0.46	1.0E-118	BE736213.1	EST_HUMAN	601307146F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3641603 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10698	23620	37116	0.46	1.0E-118	BE736213.1	EST_HUMAN	601307146F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3641603 5'
10741	23663	37158	2.31	1.0E-118	BF195407.1	EST_HUMAN	7n17609.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:3564785 3' similar to SW:ZP3A_HUMAN
10899	23819	37328	0.54	1.0E-118	AW286351.1	EST_HUMAN	P21754 ZONA PELLUCIDA SPERM-BINDING PROTEIN 3A PRECURSOR ;
11607	24545	38106	6.48	1.0E-118	AA315007.1	EST_HUMAN	UI-H-BW0-alo-a-07-0-UI.st NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729772 3'
11884	24765	38351	1.9	1.0E-118	BE908676.1	EST_HUMAN	EST188814 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to dynein, light chain 1, cytoplasmic
11884	24765	38351	1.9	1.0E-118	BE908676.1	EST_HUMAN	601499514F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901563 5'
11884	24765	38351	1.9	1.0E-118	BE908676.1	EST_HUMAN	601499514F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901563 5'
11887	24768	38355	1.51	1.0E-118	BF093687.1	EST_HUMAN	QV0-UM0091-120900-385-b12 UM0091 Homo sapiens cDNA
11887	24768	38356	1.51	1.0E-118	BF093687.1	EST_HUMAN	QV0-UM0091-120900-385-b12 UM0091 Homo sapiens cDNA
12036	24911	38356	1.58	1.0E-118	6325465	NT	Homo sapiens flap structure-specific endonuclease 1 (FEN1), mRNA
1038	15957	27034	1.75	1.0E-119	7705607	NT	Homo sapiens CGI-105 protein (LOC51011), mRNA
1950	14973	27972	2.88	1.0E-119	AB023147.1	NT	Homo sapiens mRNA for KIAA0930 protein, partial cds
3119	16176	29087	0.98	1.0E-119	8922205	NT	Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA
3254	16308		0.68	1.0E-119	AA916760.1	EST_HUMAN	on10605.st NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1556241 3' similar to WP:E04F6.2
3975	17015	28929	1.12	1.0E-119	4504116	NT	CE01214 ;
5410	18613	31391	2.79	1.0E-119	AU133399.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5423	18526	31404	14.66	1.0E-119	M89914.1	NT	AU133399 NT2RP4 Homo sapiens cDNA clone NT2RP4001961 5'
5428	18531	31411	2.88	1.0E-119	BE936121.1	EST_HUMAN	Human neurofibromin (NF1) gene, complete cds
5508	18608	31538	1.55	1.0E-119	AV693731.1	EST_HUMAN	RC1-NN0073-250800-018-g06 NN0073 Homo sapiens cDNA
5671	18766	31937	0.68	1.0E-119	AL134903.1	EST_HUMAN	AV693731 GKC Homo sapiens cDNA clone GKGDH03 5'
5671	18766	31938	0.68	1.0E-119	AL134903.1	EST_HUMAN	DKFp762M0710_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFp762M0710 5'
6250	19323	32553	7.38	1.0E-119	AI150703.1	EST_HUMAN	DKFp762M0710_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFp762M0710 5'
6415	19483	32730	0.69	1.0E-119	AF315683.1	NT	qb77c09.x1 Soares_fejal_herf_NbHH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to
6415	19483	32731	0.69	1.0E-119	AF315683.1	NT	SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10 ;
6485	19530	32778	1	1.0E-119	AI476732.1	EST_HUMAN	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6604	19663	32936	2.67	1.0E-119	X06292.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6616	19674	32852	4.98	1.0E-119	AW974193.1	EST_HUMAN	hm23f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157451 3'
7840	20600	33964	1.3	1.0E-119	BE796614.1	EST_HUMAN	Human c-fes/fps proto-oncogene
9009	21975	35395	1.15	1.0E-119	BE615150.1	EST_HUMAN	EST388296 IMAGE resequences, MAGM Homo sapiens cDNA
10113	23039	36519	0.5	1.0E-119	11545621	NT	601592005F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946081 5'
10267	23192	36679	1.1	1.0E-119	11036643	NT	601280564F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622628 5'
							Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
							Homo sapiens KIAA0477 gene product (KIAA0477), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10608	23530	37025	5.31	1.0E-119	AA465124.1	EST_HUMAN	aa32f05.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814977 5'
10870	23790	37290	1.12	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
10911	23831	37344	0.73	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10911	23831	37345	0.73	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10985	23905	37419	0.79	1.0E-119	AB032281.1	NT	Homo sapiens Sod mRNA for stearyl-CoA desaturase, complete cds
11394	24340	37870	1.86	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
11394	24340	37871	1.86	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
11535	24476		13.43	1.0E-119	BF589571.1	EST_HUMAN	602186072F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310633 5'
12486	25901		3.21	1.0E-119	AW847519.1	EST_HUMAN	RC3-CT0212-240999-011-f03 CT0212 Homo sapiens cDNA
301	13395	28322	0.99	1.0E-120	4507334	NT	Homo sapiens synaptobiotin 1 (SYNU1), mRNA
1042	14088	27040	1.6	1.0E-120	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B), mRNA, complete cds
1042	14088	27041	1.6	1.0E-120	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B), mRNA, complete cds
1422	14455	27429	2.56	1.0E-120	N44873.1	EST_HUMAN	y40g12.r1 Scars melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:273766 5'
1605	14637	27614	2.5	1.0E-120	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
1823	14850	27844	1.4	1.0E-120	4557250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2534	15537	28558	1.08	1.0E-120	4755124	NT	Homo sapiens aquaporin 4 (AQP4), splice variant b, mRNA
3318	13395	28322	1.34	1.0E-120	4507334	NT	Homo sapiens synaptobiotin 1 (SYNU1), mRNA
4385	17413	30297	1.81	1.0E-120	AF059490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4385	17413	30298	1.81	1.0E-120	AF059490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4691	17712	30606	2.67	1.0E-120	AF098463.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
4691	17712	30607	2.67	1.0E-120	AF098463.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
5825	18915	32098	13.85	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
5825	18915	32099	13.85	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
6583	19843	32910	0.53	1.0E-120	M29428.1	NT	Human P-glycoprotein (MDR1) gene, exons 6 and 7
6583	19843	32911	0.53	1.0E-120	M29428.1	NT	Human P-glycoprotein (MDR1) gene, exons 6 and 7
7823	20771	34147	1.84	1.0E-120	D34619.1	NT	Human TBXAS1 gene for thromboxane synthase, exon 7
8226	21195	34602	1.76	1.0E-120	Y00087.1	NT	Human gene for neurofilament subunit M (NF-M)
8226	21195	34603	1.76	1.0E-120	Y00087.1	NT	Human gene for neurofilament subunit M (NF-M)
8675	21643	35088	2.82	1.0E-120	BF337599.1	EST_HUMAN	602035352F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4183333 5'
8747	21715	35138	0.76	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8747	21715	35139	0.75	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8751	21719	35141	2.5	1.0E-120	AB007964.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8751	21719	35142	2.5	1.0E-120	AB007964.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8796	21763	35185	1.13	1.0E-120	AB007934.1	NT	Homo sapiens mRNA for KIAA0465 protein, partial cds

Page 465 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9859	22795	36247	4.14	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625644 5'
9859	22795	36248	4.14	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625644 5'
10102	23028	36505	3.99	1.0E-120	BF306541.1	EST_HUMAN	601888956F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122876 5'
10118	23044	36524	7.33	1.0E-120	AU133205.1	EST_HUMAN	AU133205 NT2RP4 Homo sapiens cDNA clone NT2RP4001541 5'
10135	23081	36539	0.67	1.0E-120	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10252	23177		0.51	1.0E-120	A1904151.1	EST_HUMAN	CH-BT043-090299-075 BT043 Homo sapiens cDNA
10436	23358	36946	3.02	1.0E-120	AB026000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
11461	24404	37952	19.45	1.0E-120	BE296387.1	EST_HUMAN	601178727F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532015 5'
11672	24638	38216	2.5	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11672	24638	38217	2.5	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11963	24842	38436	2.23	1.0E-120	U94774.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, 5'UTR and exon 1
12632	25318	31785	1.45	1.0E-120	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
74	13191	26113	0.97	1.0E-121	Y18000.1	NT	Homo sapiens NF2 gene
378	13462	26392	1.92	1.0E-121	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
725	15948	26721	1.83	1.0E-121	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
1983	15004	28007	1.17	1.0E-121	4755139	NT	Homo sapiens Inositol polyphosphate-4-phosphatase, type I, 107KD (INPP4A), splice variant a, mRNA
1983	15004	28008	1.17	1.0E-121	4755139	NT	Homo sapiens Inositol polyphosphate-4-phosphatase, type I, 107KD (INPP4A), splice variant a, mRNA
2112	15129	28149	1.36	1.0E-121	L76631.1	NT	Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds
2980	16038	28961	1.69	1.0E-121	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
3097	16154	29067	3.41	1.0E-121	Y19208.1	NT	Homo sapiens hrb3 gene for hair keratin, exons 1 to 9
3097	16154	29068	3.41	1.0E-121	Y19208.1	NT	Homo sapiens hrb3 gene for hair keratin, exons 1 to 9
3547	16593	29518	0.84	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3547	16593	29519	0.84	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3690	16733	29846	8.63	1.0E-121	AF155156.2	NT	Homo sapiens adaptor-related protein complex AP-4 epsilon subunit mRNA, complete cds
4358	17385	30267	1.39	1.0E-121	AI263294.1	EST_HUMAN	qx57501.x1 NCI CGAP Part1 Homo sapiens cDNA clone IMAGE:2005417 3'
5012	18026	30911	3.4	1.0E-121	X91937.1	NT	H. sapiens ECE-1 gene (exon 17)
5182	18191	31067	0.93	1.0E-121	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
5340	18445	31198	0.86	1.0E-121	BE22250.1	EST_HUMAN	hu09f08.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3166119 3'
5641	18737	31901	0.58	1.0E-121	BE271424.1	EST_HUMAN	601140485F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049820 5'
7072	20094		0.7	1.0E-121	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
7155	18387	31230	0.82	1.0E-121	AW898086.1	EST_HUMAN	RC3-NN0066-270400-011-402 NN0066 Homo sapiens cDNA
7155	18387	31231	0.82	1.0E-121	AW898086.1	EST_HUMAN	RC3-NN0066-270400-011-402 NN0066 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8269	21238	34649	1.57	1.0E-121	11436217	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2), mRNA
8273	21242	34653	2.22	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
8273	21242	34654	2.22	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
10217	23142	36630	0.79	1.0E-121	AW583858.1	EST_HUMAN	la05g05.y1 Human Pancreatic Islets Homo sapiens cDNA 5' similar to TR:075457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA. ;
10217	23142	36631	0.79	1.0E-121	AW583858.1	EST_HUMAN	la05g05.y1 Human Pancreatic Islets Homo sapiens cDNA 5' similar to TR:075457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA. ;
11130	24090	37619	1.87	1.0E-121	11427788	NT	Homo sapiens COX11 (yeast) homodog, cytochrome c oxidase assembly protein (COX11), mRNA
11136	24096	37625	1.52	1.0E-121	AF064200.1	NT	Homo sapiens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4*E468 allele, complete cds
11315	24265	37793	3.61	1.0E-121	7330334	NT	Homo sapiens chloride intracellular channel 4 like (CLIC4L), mRNA
11340	24290	37815	3.42	1.0E-121	N59824.1	EST_HUMAN	y74c01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248448 3'
11664	24600	38175	4.22	1.0E-121	AU119320	EST_HUMAN	AU119320 HEMBA1 Homo sapiens cDNA clone HEMBA1005636 5'
267	13363	26287	2.23	1.0E-122	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
336	13425	26347	3.36	1.0E-122	AF114483.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
358	13445	26372	2.1	1.0E-122	11526179	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
883	13938	26897	3.29	1.0E-122	AF114483.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
1224	14262	27219	16.66	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
1702	14732	27714	1.02	1.0E-122	AF167703.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
1725	14755	27741	1.67	1.0E-122	11418424	NT	Homo sapiens collagen, type XI, alpha 1 (COL12A1), mRNA
1725	14755	27742	1.67	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1831	14858	27856	5.11	1.0E-122	BE906024.1	EST_HUMAN	601497032F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899368 5'
2499	15502	28528	8.15	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2499	15502	28529	8.15	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2851	15911	28834	0.91	1.0E-122	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
4883	17900	30789	1.03	1.0E-122	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
5025	18039	31904	1.4	1.0E-122	AW504645.1	EST_HUMAN	UI-HF-BN0-all-a-03-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079948 5'
5643	18739	31904	1.31	1.0E-122	BE266039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
8920	18739	31904	7.59	1.0E-122	BE266039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
7422	20389	33740	0.6	1.0E-122	AA686871.1	EST_HUMAN	ak49h06.s1 Soares tests_NHT Homo sapiens cDNA clone IMAGE:1409339 3'

Page 467 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8135	21072	34471	0.51	1.0E-122	AA224259.1	EST_HUMAN	zr15a03.r1 Stratigene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:663436 5' similar to TR:G940370 G940370 1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE ;
8135	21072	34472	0.51	1.0E-122	AA224259.1	EST_HUMAN	zr15a03.r1 Stratigene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:663436 5' similar to TR:G940370 G940370 1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE ;
9148	22114	35539	0.56	1.0E-122	AJ276801.1	NT	Homo sapiens mRNA for doublesex and mab-3 related transcription factor 1 (DMRT1)
9383	22348	35780	1.17	1.0E-122	11424218	NT	Homo sapiens lethal giant larvae (Drosophila) homolog 2 (LLGL2), mRNA
9678	22631	36088	0.78	1.0E-122	AJ356618.1	EST_HUMAN	q32h07.x1 NCI CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW:MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1. ;
9678	22631	36087	0.78	1.0E-122	AJ356618.1	EST_HUMAN	q32h07.x1 NCI CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW:MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1. ;
10493	23415	36913	0.77	1.0E-122	AL117234.1	NT	Novel human gene mapping to chromosome X, isoform of dbl (proto-oncogene)
11714	24677	39255	6.11	1.0E-122	AB024068.1	NT	Homo sapiens gene for B120, exon 10
12102	24973	38570	1.5	1.0E-122	11434816	NT	Homo sapiens thyroid hormone receptor interactor 11 (TRIP11), mRNA
12228	25063		5.83	1.0E-122	11418187	NT	Homo sapiens phosphomannomutase 1 (PMM1), mRNA
13107	14262	27219	3.03	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
769	13828	26772	1.18	1.0E-123	BF345274.1	EST_HUMAN	802018058F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
769	13828	26773	1.18	1.0E-123	BF345274.1	EST_HUMAN	802018058F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
1015	14063	27014	5.55	1.0E-123	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1024	14070	27021	2.2	1.0E-123	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1243	14279	27241	5.25	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1243	14279	27242	5.25	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1449	14482	27459	83.95	1.0E-123	AJ388641.1	NT	Homo sapiens partial mRNA for immunoglobulin kappa chain variable region (IGVK gene), sample GN02
2109	15126	28145	2.75	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2109	15126	28146	2.75	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2109	15126	28147	2.75	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2323	15334		3.14	1.0E-123	7705962	NT	Homo sapiens RAB6-like protein (LOC51209), mRNA
3264	16318	29239	1.52	1.0E-123	6912617	NT	Homo sapiens glutaminyl-peptide cyclotransferase (glutaminyl cyclase) (QPCT), mRNA
5622	18621	31555	1.58	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds
5522	18621	31556	1.58	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds
5661	18757	31925	1.31	1.0E-123	BE789746.1	EST_HUMAN	601591108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945433 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6613	19671	32949	1.97	1.0E-123	AU118435.1	EST_HUMAN	AU118435 HEMBA1 Homo sapiens cDNA clone HEMBA1003591 5'
7199	20223	33554	0.83	1.0E-123	H53198.1	EST_HUMAN	y8403.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:202444 5' similar to SP:YAK1_YEAST P14680 PROTEIN KINASE YAK1 ;
7212	20235	33569	1.24	1.0E-123	U42224.1	NT	Human growth hormone releasing hormone gene, exon 7
7400	20368	33721	0.57	1.0E-123	U55258.1	NT	Human hBRAVO(Nr-CAM) precursor (hBRAVO(Nr-CAM) gene, complete cds
7632	20592	33955	0.9	1.0E-123	11525833	NT	Homo sapiens heparan sulfate (glucosaminyl) 3-O-sulfotransferase 2 (HS3ST2), mRNA
7904	20847	34232	1.29	1.0E-123	11436439	NT	Homo sapiens 2'-5'-oligoadenylate synthetase 2 (OAS2), mRNA
7913	20856	34244	1.87	1.0E-123	BE263001.1	EST_HUMAN	601152815F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3509182 5'
8083	21020	34419	0.71	1.0E-123	N35841.1	EST_HUMAN	y89d11.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR:S49611 S49611 protein kinase Pkpa - Phycomyces blakesleeanus ;
8083	21020	34420	0.71	1.0E-123	N35841.1	EST_HUMAN	y89d11.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR:S49611 S49611 protein kinase Pkpa - Phycomyces blakesleeanus ;
8248	21217	34626	0.5	1.0E-123	AU131881.1	EST_HUMAN	AU131881 NT2RP3 Homo sapiens cDNA clone NT2RP3003409 5'
8248	21217	34627	0.5	1.0E-123	AU131881.1	EST_HUMAN	AU131881 NT2RP3 Homo sapiens cDNA clone NT2RP3003409 5'
8880	21847		1.43	1.0E-123	AW371924.1	EST_HUMAN	RC4-BT0311-251199-012-a07 BT0311 Homo sapiens cDNA
9724	22752	36205	2.03	1.0E-123	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9863	22799	36253	31.72	1.0E-123	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabefla2) mRNA, complete cds
10370	23293		0.44	1.0E-123	4504806	NT	Homo sapiens jerky (mouse) homolog-like (JRL), mRNA
12029	24905	38499	5.3	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
12029	24905	38500	5.3	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
268	13364	26288	1.18	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
268	13364	26289	1.18	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
274	13370		0.79	1.0E-124	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
486	13559	26485	2.11	1.0E-124	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
692	13754	26683	8.04	1.0E-124	AA397551.1	EST_HUMAN	z81b04.r1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 (G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
692	13754	26684	8.04	1.0E-124	AA397551.1	EST_HUMAN	z81b04.r1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 (G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
758	13818	26763	6.06	1.0E-124	AF155654.1	NT	Human putative ribosomal protein S1 mRNA
809	13867	26816	1.34	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
905	13960	26916	4.34	1.0E-124	7705446	NT	Homo sapiens hypothetical protein (HSPC068), mRNA
1349	14384	27352	12.68	1.0E-124	AF274892.1	NT	Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
1349	14384	27353	12.68	1.0E-124	AF274892.1	NT	Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds

Page 469 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1832	14859	27857	2.84	1.0E-124	AJ131712.1	NT	Homo sapiens mRNA for nucleolar RNA-helicase (noH61 gene)
2078	15093	28110	1.59	1.0E-124	BE879624.1	EST_HUMAN	60149171F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3893954 5'
2463	15467	28490	1.29	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
3502	16548	29476	0.81	1.0E-124	S78884.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon
3502	16549	29476	0.81	1.0E-124	S78884.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) gene, exon
3915	16955	29887	0.84	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4102	17136	30031	0.95	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4772	17792	30883	0.81	1.0E-124	BE220437.1	EST_HUMAN	h93607.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175788 3'
4776	17795	30887	1.87	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
5370	18475	31348	10.25	1.0E-124	8922337	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5755	18949	32029	1.03	1.0E-124	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
5989	19074	32272	6.55	1.0E-124	BF696135.1	EST_HUMAN	60212494F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281635 5'
6293	19365	32604	0.67	1.0E-124	AV711263.1	EST_HUMAN	AV711263 Cu Homo sapiens cDNA clone CuA4DF07 5'
6572	19632	32899	0.78	1.0E-124	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7208	20231	33564	2.95	1.0E-124	Y11717.1	NT	Musculus mRNA for hoxa3 gene
7344	20315	33659	1.04	1.0E-124	BE271295.1	EST_HUMAN	60094377F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2966585 5'
7344	20315	33660	1.04	1.0E-124	BE271295.1	EST_HUMAN	60094377F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2966585 5'
7801	20753	34129	2.59	1.0E-124	AA630331.1	EST_HUMAN	ac08h05.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:865897 3'
8128	21065	34464	1.78	1.0E-124	M37277.1	NT	Human Ig germline H-chain D-region genes, partial cds
8128	21065	34465	1.78	1.0E-124	M37277.1	NT	Human Ig germline H-chain D-region genes, partial cds
8601	21569	34985	13.39	1.0E-124	4506654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
8806	21773	35198	1.25	1.0E-124	AW612106.1	EST_HUMAN	hg94a09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2963240 3' similar to TR:O95162
8806	21773	35199	1.25	1.0E-124	AW612106.1	EST_HUMAN	O95162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE. ;
9517	22480	35924	0.62	1.0E-124	AI799864.1	EST_HUMAN	hg94a09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2963240 3' similar to TR:O95162
9517	22480	35925	0.62	1.0E-124	AI799864.1	EST_HUMAN	O95162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE. ;
9846	22782	36236	1.85	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:2321428 3'
9846	22782	36237	1.85	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:2321428 3'
9937	22864	36325	0.66	1.0E-124	AF022655.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9937	22864	36326	0.66	1.0E-124	AF022655.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9967	22894	36358	8.08	1.0E-124	AI767133.1	EST_HUMAN	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
9967	22894	36357	8.08	1.0E-124	AI767133.1	EST_HUMAN	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
9967	22894	36357	8.08	1.0E-124	AI767133.1	EST_HUMAN	wf63f02.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'
9967	22894	36357	8.08	1.0E-124	AI767133.1	EST_HUMAN	wf63f02.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E- Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10230	23155	36645	1.75	1.0E-124	AW503755.1	EST_HUMAN	UI-HF-BNO-skz-b-04-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078846 5'
11386	24333	37862	1.53	1.0E-124	U94776.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, exons 6 through 17
11660	24596	38169	5.95	1.0E-124	AW665663.1	EST_HUMAN	h05c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2980906 3'
11801	23956	37479	2.06	1.0E-124	AI448455.1	EST_HUMAN	119e03.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN ;
11801	23956	37480	2.06	1.0E-124	AI448455.1	EST_HUMAN	119e03.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN ;
12305	13754	26983	4.06	1.0E-124	AA397551.1	EST_HUMAN	z81b04.11 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
12305	13754	26984	4.06	1.0E-124	AA397551.1	EST_HUMAN	z81b04.11 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
12730	25383	31749	1.36	1.0E-124	AB029016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12993	25852	31436	1.67	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12993	25852	31437	1.67	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
319	13411		10.43	1.0E-125	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
426	13121	26019	5.43	1.0E-125	BE743922.1	EST_HUMAN	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926855 5'
645	13711	26832	1.28	1.0E-125	AI110656.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
645	13711	26833	1.26	1.0E-125	AI110656.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
729	13790	26725	2.34	1.0E-125	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
861	13917	26875	1.61	1.0E-125	AA042813.1	EST_HUMAN	z163c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
1000	14051	27003	1.16	1.0E-125	AL163210.2	NT	Homo sapiens chromosome 21 segment H321C010
1156	14198	27148	2.2	1.0E-125	7662279	NT	Homo sapiens KIAA0744 gene product: histone deacetylase 7 (KIAA0744), mRNA
1682	16874	27692	1.99	1.0E-125	7661867	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
1817	14844	27836	1.65	1.0E-125	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1828	14855	27852	2.84	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
1828	14855	27853	2.84	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
2366	15374	28395	1.78	1.0E-125	AA011278.1	EST_HUMAN	z01g09.11 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429568 5'
2604	15604	28626	1.19	1.0E-125	4504696	NT	Homo sapiens inhibin, alpha (INH) mRNA
2604	15604	28627	1.19	1.0E-125	4504696	NT	Homo sapiens inhibin, alpha (INH) mRNA
3022	18311	29001	1.19	1.0E-125	BE018009.1	EST_HUMAN	b674f06.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3048131 5' similar to TR:O95604 O95604 ZINC FINGER PROTEIN ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptbr
3872	16911	29821	1.11	1.0E-125	AA042813.1	EST_HUMAN	2k53c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X68857.cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
4580	17602	30498	1.86	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4580	17602	30499	1.86	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4648	17689	30556	1.66	1.0E-125	BE315412.1	EST_HUMAN	601141152F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140796 5'
5073	18058	32259	1.47	1.0E-125	11436448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
5994	18078	32276	1.01	1.0E-125	BE175169.1	EST_HUMAN	QV2-HT0577-010500-165-b08 HT0577 Homo sapiens cDNA
6041	19123	32328	3.58	1.0E-125	BE892660.1	EST_HUMAN	601433472F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918962 5'
6086	19166	32378	0.6	1.0E-125	AI679904.1	EST_HUMAN	tu67c07.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2256108 3' similar to WP:C46G9.2 CE01854;
6413	19481	32728	0.68	1.0E-125	BE736055.1	EST_HUMAN	601305670F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3640097 5'
6733	19789	33068	1.29	1.0E-125	BE562526.1	EST_HUMAN	601335828F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3689790 5'
6733	19789	33069	1.29	1.0E-125	BE562526.1	EST_HUMAN	601335828F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3689790 5'
7263	19898	33296	5.05	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7263	19898	33297	5.05	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7775	20728	34100	1.04	1.0E-125	BE278823.1	EST_HUMAN	601159076F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3605603 5'
8032	20969	34363	0.54	1.0E-125	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
8891	21857	35278	0.99	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
8891	21857	35279	0.99	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9473	22437	35876	12.5	1.0E-125	BE181640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9473	22437	35878	12.5	1.0E-125	BE181640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9736	22764	36219	0.93	1.0E-125	AI665996.1	EST_HUMAN	tn62b03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2171981 3' similar to TR:Q14089 Q14089 HYPOTHETICAL PROTEIN;
10819	23740	37242	0.65	1.0E-125	BE794576.1	EST_HUMAN	601590345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944531 5'
10860	23780	37280	0.74	1.0E-125	AB002298.1	NT	Human mRNA for KIAA0300 gene, partial cds
11042	24006	37533	2.54	1.0E-125	AF043458.1	NT	Homo sapiens I-REL gene, exon 5
11124	24084	37610	1.97	1.0E-125	AW131202.1	EST_HUMAN	x58902.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284 LAMBDA/IOTA PROTEIN KINASE C-INTERACTING PROTEIN, [1];
11124	24084	37611	1.97	1.0E-125	AW131202.1	EST_HUMAN	x58902.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284 LAMBDA/IOTA PROTEIN KINASE C-INTERACTING PROTEIN, [1];
11471	24414	37963	2.99	1.0E-125	AB014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
11621	24559	38121	2.06	1.0E-125	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA

Page 472 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11626	24584	38126	5	1.0E-125	AF026029.1	NT	Homo sapiens pdy(A) binding protein II (PABP2) gene, complete cds
11729	24615	38192	1.68	1.0E-125	AW812899.1	EST_HUMAN	RC3-ST0186-250200-018-ct11 ST0186 Homo sapiens cDNA
11830	24713	38296	4.32	1.0E-125	BE074267.1	EST_HUMAN	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
11830	24713	38297	4.32	1.0E-125	BE074267.1	EST_HUMAN	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
12106	18942	32127	1.48	1.0E-125	BF683645.1	EST_HUMAN	602139874F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4300770 5'
775	13834	26780	6.16	1.0E-126	4758007	NT	Homo sapiens CDC-like kinase (CLK) mRNA
920	13974	28926	0.8	1.0E-126	X68735.1	NT	H. sapiens gene for alpha1-antichymotrypsin, exon 3
2352	15361	28383	0.91	1.0E-126	8923056	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
2352	15361	28384	0.91	1.0E-126	8923056	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
2605	15605	28628	1.41	1.0E-126	6382078	NT	Homo sapiens RAN binding protein 2 (RANBP2), mRNA
3087	16145	29058	7.58	1.0E-126	AA160709.1	EST_HUMAN	zo72c03.r1 Stratagene pancreas (#837208) Homo sapiens cDNA clone IMAGE:592420 5'
3087	16145	29059	7.58	1.0E-126	AA160709.1	EST_HUMAN	zo72c03.r1 Stratagene pancreas (#837208) Homo sapiens cDNA clone IMAGE:592420 5'
3088	16146	29060	1.02	1.0E-126	BF510408.1	EST_HUMAN	UJ-H-B14-ace-b-05-Q-UJ.s1 NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084608 3'
3088	16146	29061	1.02	1.0E-126	BF510408.1	EST_HUMAN	UJ-H-B14-ace-b-05-Q-UJ.s1 NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084608 3'
3645	16688	29603	0.75	1.0E-126	X53941.1	NT	H. sapiens DNA for liver cytochrome b5 pseudogene
3668	16711	29626	2.09	1.0E-126	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
4826	17843	30741	1.15	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4826	17843	30742	1.15	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4872	17889	30777	1.38	1.0E-126	N34078.1	EST_HUMAN	yx78c06.r1 Soares melanocyte 2/NbHM Homo sapiens cDNA clone IMAGE:267850 5'
5787	18879	32061	0.71	1.0E-126	T66998.1	EST_HUMAN	ya52b12.s1 Soares fetal liver spleen TNF.LS Homo sapiens cDNA clone IMAGE:86627 3'
6360	19429	32672	3.23	1.0E-126	AA460075.1	EST_HUMAN	z66603.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:796444 5' similar to TR:G1145980 G1145980 T1TIN :
6422	19489	32739	3.5	1.0E-126	AB040958.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
6422	19489	32740	3.5	1.0E-126	AB040958.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7742	20896	34061	0.98	1.0E-126	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7742	20896	34062	0.98	1.0E-126	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7969	20908	34299	0.64	1.0E-126	AF136463.1	EST_HUMAN	AU136463 PLACE1 Homo sapiens cDNA clone PLACE1004325 5'
8031	20968	34362	0.66	1.0E-126	AB06483.1	EST_HUMAN	w08701.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350009 3' similar to SW:MP22_HUMAN Q14168 MAGUK P65 SUBFAMILY MEMBER 2 ;
8210	21179	34587	0.92	1.0E-126	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8210	21179	34588	0.92	1.0E-126	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8320	21289	34703	4.9	1.0E-126	X16609.1	NT	Human mRNA for ankyrin (variant 2.1)

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8524	21492	34907	1.02	1.0E-126	AA483368.1	EST_HUMAN	ne74b12.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:909983 similar to SW:TSG6_HUMAN
10155	23080	36555	0.44	1.0E-126	4505424	NT	P98066 TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR ;
11208	24162	37892	4.45	1.0E-126	BF683175.1	EST_HUMAN	Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), splice variant 1, mRNA
11846	24728	38315	2.96	1.0E-126	BE261660.1	EST_HUMAN	602139138F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4298240 5'
12766	18352	31297	7.78	1.0E-126	BE749922.1	EST_HUMAN	601149404F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502129 5'
173	13275	26201	1.37	1.0E-127	AB024597.1	NT	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926885 5'
173	13275	26202	1.37	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
174	13275	26201	1.7	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
174	13275	26202	1.7	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
273	13369	26296	0.9	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
273	13369	26297	0.9	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
882	13937	26896	0.98	1.0E-127	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
917	13971	26925	2.54	1.0E-127	U72621.2	NT	Homo sapiens lost on transformation LOT1 mRNA, complete cds
1700	14730	27712	1.18	1.0E-127	4827063	NT	Homo sapiens ubiquitin specific protease 8 (USP8) mRNA
2080	15097	28113	4.83	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2080	15097	28114	4.83	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2210	15225	28246	10.89	1.0E-127	4506620	NT	Homo sapiens ribosomal protein L26 (RPL26) mRNA
2349	15358	28380	3.28	1.0E-127	AF246505.1	NT	Homo sapiens adiccan mRNA, complete cds
2617	15615	28640	2.23	1.0E-127	X12881.1	NT	Human mRNA for cyclkeratin 18
2628	15627	28651	1.15	1.0E-127	AA450131.1	EST_HUMAN	zx42a02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789098 5'
2628	15627	28652	1.15	1.0E-127	AA450131.1	EST_HUMAN	zx42a02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789098 5'
3702	16745	28658	0.98	1.0E-127	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3824	16864	29768	0.81	1.0E-127	AW161297.1	EST_HUMAN	eu80e06.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782594 5' similar to
4249	17278	30159	0.64	1.0E-127	AL163247.2	NT	TRQ15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN ; contains element MER22 repetitive element ;
4282	17311	30189	20.15	1.0E-127	7706239	NT	Homo sapiens chromosome 21 segment HS21C047
4282	17311	30190	20.15	1.0E-127	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4523	17648	30436	1.42	1.0E-127	AF262297.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4633	17654	30541	5.27	1.0E-127	4506384	NT	Homo sapiens cytochrome P450 retinoid metabolizing protein P450RA1-2 mRNA, complete cds

Page 474 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4663	17684		2.42	1.0E-127	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4700	17721	30814	1.32	1.0E-127	6812639	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
5791	18883	32065	1.46	1.0E-127	W03547.1	EST_HUMAN	z01a10.1 Scores melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:291258 5' similar to SW:PIP6_RAT P10688 1-PHOSPHATIDYLINOSITOL-4,5-BISPHOSPHATE PHOSPHODIESTERASE DELTA 1
5826	18916	32100	2.07	1.0E-127	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
5900	18987	32178	4.51	1.0E-127	X85764.1	NT	H. sapiens NOS2 gene, exon 6
6286	19358	32594	1.95	1.0E-127	X84060.1	NT	H. sapiens TCF11 gene, exon 3-6
6454	19519	32769	5.46	1.0E-127	4504778	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
6815	19869	33158	0.91	1.0E-127	11421696	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3), mRNA
7264	19699	33298	1.05	1.0E-127	4826877	NT	Homo sapiens reelin (RELN) mRNA
8066	21003	34400	1.34	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
8066	21003	34401	1.34	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
8076	21013	34413	0.58	1.0E-127	BF671355.1	EST_HUMAN	602151232F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4282575 5'
8079	21016	34416	0.6	1.0E-127	AW98292.1	EST_HUMAN	QV3-BN0046-150300-121-h11 BN0046 Homo sapiens cDNA
9239	22205	35637	1.12	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9239	22205	35638	1.12	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9998	22925	36390	4.63	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9998	22925	36391	4.63	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10232	23157	36646	0.76	1.0E-127	AI298932.1	EST_HUMAN	qm94h09.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1896449 3'
10708	23630	37126	1.86	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
11492	24435	37983	5.12	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
11492	24435	37984	5.12	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
11949	24828	38423	2.78	1.0E-127	BE95415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919917 5'
11949	24828	38424	2.78	1.0E-127	BE95415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919917 5'
12089	21003	34400	2.11	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
12089	21003	34401	2.11	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
12532	13275	26201	1.39	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12532	13275	26202	1.39	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12721	23375	31776	2.4	1.0E-127	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
13062	23856		1.47	1.0E-127	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
460	13533	26460	3.35	1.0E-128	BE385617.1	EST_HUMAN	601278127F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618822 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1158	14200	27150	2.18	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1158	14200	27151	2.18	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2084	15101	28117	9.34	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2084	15101	28118	9.34	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2219	19233	28257	31.4	1.0E-128	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
2451	19456		1.49	1.0E-128	11437455	NT	Homo sapiens chromatin-specific transcription elongation factor, 140 kDa subunit (FACTP140), mRNA
3405	19454	29377	1.23	1.0E-128	AB030373.1	NT	Homo sapiens mRNA for KIAA1247 protein, partial cds
4693	17714	30609	5.95	1.0E-128	11426673	NT	Homo sapiens prospero-related homeobox 1 (PROX1), mRNA
5624	18720	31879	0.64	1.0E-128	X69539.1	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exon 12
6558	19618	32883	1.94	1.0E-128	11420965	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
7116	20050	33353	6.42	1.0E-128	BF224345.1	EST_HUMAN	7q86b10.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3905794 5'
7661	20621	33986	0.69	1.0E-128	BE614105.1	EST_HUMAN	601503846F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3905794 5'
7983	20922	34313	0.53	1.0E-128	BF529931.1	EST_HUMAN	602042322F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179988 5'
7983	20922	34314	0.53	1.0E-128	BF529931.1	EST_HUMAN	602042322F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179988 5'
7983	20922	34315	0.53	1.0E-128	BF529931.1	EST_HUMAN	602042322F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179988 5'
8080	21017	34417	0.62	1.0E-128	11545923	NT	Homo sapiens putative ABC transporter (WHITE2), mRNA
8139	21076	34476	0.49	1.0E-128	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
8139	21076	34477	0.49	1.0E-128	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
8693	21859	35281	0.5	1.0E-128	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8693	21859	35282	0.5	1.0E-128	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
10496	23418	36917	1.73	1.0E-128	AA639198.1	EST_HUMAN	ns04at1.1 NCI CGAP_Ewt Homo sapiens cDNA clone IMAGE:1182620 similar to TR:G951338 G951338
11065	24026	37552	3.42	1.0E-128	11425254	NT	CHROMOSOME SEGREGATION GENE HOMOLOG CAS. ;
11073	24035	37559	3.94	1.0E-128	AA926859.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2D (GRIN2D), mRNA
11149	24109	37635	1.48	1.0E-128	AJ252060.1	NT	DEPENDENT KINASES REGULATORY SUBUNIT 1 (HUMAN);
11202	24156	37687	2.69	1.0E-128	BE384475.1	EST_HUMAN	Homo sapiens mRNA for TRABID protein (TRABID gene)
12400	26174		8.88	1.0E-128	AW955290.1	EST_HUMAN	601277826F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618750 5'
122	13486	26423	0.89	1.0E-129	S37722.1	NT	EST T367360 MAGE cDNAs, MAGEC2 Homo sapiens cDNA
413	13486	26423	1	1.0E-129	S37722.1	NT	insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1731	14761	27745	3.06	1.0E-129	AL096880.1	NT	insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1736	14766	27750	2.5	1.0E-129	AF240786.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1736	14766	27751	2.5	1.0E-129	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1863	14888	27885	2.86	1.0E-129	11418522	NT	Homo sapiens zinc finger protein 76 (expressed in testis) (ZNF76), mRNA
3145	16202	29113	1.33	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3145	16202	29114	1.33	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3145	16202	29115	1.33	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
4192	17223	30112	1.87	1.0E-129	AB040892.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
4309	17338	30216	1.86	1.0E-129	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5 Cardiomyopathy associated gene 5
4309	17338	30217	1.86	1.0E-129	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5 Cardiomyopathy associated gene 5
6210	19284	32518	4.28	1.0E-129	AJ006345.1	NT	Homo sapiens KVLQT1 gene
6674	19731	33007	0.54	1.0E-129	BE88834.1	EST_HUMAN	607513861F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3915350 5'
7334	20305	33649	4.07	1.0E-129	AJ006345.1	NT	Homo sapiens KVLQT1 gene
7396	20364	33716	6.8	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
7771	20724	34095	0.78	1.0E-129	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
7771	20724	34096	0.78	1.0E-129	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
8661	21629		4.37	1.0E-129	AB014534.1	NT	Homo sapiens mRNA for KIAA0634 protein, partial cds
10439	23361	36850	0.79	1.0E-129	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
10439	23361	36851	0.79	1.0E-129	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
10878	23798	37299	0.48	1.0E-129	AI199117.1	EST_HUMAN	q140408.x1 NCL_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:1858959 3' similar to TR:Q14840 Q14840 MITOGEN INDUCIBLE GENE MIG-2;
10878	23798	37300	0.48	1.0E-129	AI199117.1	EST_HUMAN	q140408.x1 NCL_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:1858959 3' similar to TR:Q14840 Q14840 MITOGEN INDUCIBLE GENE MIG-2;
11557	24497	38053	2.69	1.0E-129	AA625526.1	EST_HUMAN	af7207.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1047589 5'
11630	20364	33716	6.2	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
12386	25164		4.21	1.0E-129	H83155.1	EST_HUMAN	y49c05.r1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:199112 5' similar to SP-B48150 B48150 HP-25=HIBERNATION-RELATED PROTEIN - TAMIAS ASIATICUS=ASIAN;
12758	25401		2.63	1.0E-129	AL120739.1	EST_HUMAN	DKFZp762K171_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762K171 5'
77	13194	26117	0.65	1.0E-130	7705530	NT	Homo sapiens hypothetical protein (HSPC242), mRNA
1174	14215	27170	5.95	1.0E-130	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1675	14707	27685	13.33	1.0E-130	BE275192.1	EST_HUMAN	601121995F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346366 5'
1675	14707	27686	13.33	1.0E-130	BE275192.1	EST_HUMAN	601121995F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346366 5'
2000	15021		3.15	1.0E-130	X04092.1	NT	Human gene for catalase (EC 1.1.1.6) exon 9 mapping to chromosome 11, band p13

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2781	15773		8.37	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
2890	15949	28864	1.3	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3885466 5'
2890	15949	28865	1.3	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3885466 5'
3591	16636	29556	1.27	1.0E-130	AF240998.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3779	15949	28864	4.55	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3885466 5'
3779	15949	28865	4.55	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3885466 5'
3957	16997	28912	1.41	1.0E-130	AW503580.1	EST_HUMAN	UI-HF-BNO-aky-g-06-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078731 5'
4099	17133	30027	1	1.0E-130	M97710.1	NT	Human T-cell receptor (V alpha 22.1, J alpha RPM4265-variant, C alpha 1) mRNA
4569	17592	30485	8.22	1.0E-130	AW843993.1	EST_HUMAN	CNA-CN0045-180200-511-f02 CN0045 Homo sapiens cDNA
5133	18142	31021	1.53	1.0E-130	AW363299.1	EST_HUMAN	RCO-CT0318-201199-031-ct1 CT0318 Homo sapiens cDNA
5133	18142	31022	1.53	1.0E-130	AW363299.1	EST_HUMAN	RCO-CT0318-201199-031-ct1 CT0318 Homo sapiens cDNA
6891	19843	33239	0.63	1.0E-130	X57825.1	NT	Human germline immunoglobulin lambda light chain pseudogene (Vil.1)
6894	20120	33433	0.89	1.0E-130	AW843875.1	EST_HUMAN	CNA-CN0045-170200-225-g03 CN0045 Homo sapiens cDNA
6894	20120	33434	0.89	1.0E-130	AW843875.1	EST_HUMAN	CNA-CN0045-170200-225-g03 CN0045 Homo sapiens cDNA
7010	20136	33452	0.88	1.0E-130	11425446	NT	Homo sapiens estrogen-responsive B box protein (EBBP), mRNA
7466	20432	33788	2.06	1.0E-130	11418777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7574	20536	33894	0.55	1.0E-130	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7574	20536	33895	0.55	1.0E-130	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
9030	21996		0.9	1.0E-130	AF008551.1	NT	Homo sapiens aurora-related kinase 1 (ARK1) mRNA, complete cds
9171	22137	35563	2.91	1.0E-130	AW956242.1	EST_HUMAN	EST368312 IMAGE rescues, MAGD Homo sapiens cDNA
9569	22531	35981	1.74	1.0E-130	AB037756.1	NT	Homo sapiens mRNA for KIAA1335 protein, partial cds
10293	23218		1.29	1.0E-130	AW103454.1	EST_HUMAN	xd36606.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2896874 3'
12015	24892	38489	1.71	1.0E-130	4504142	NT	Homo sapiens glutamate receptor, metabotropic 5 (GRM5) mRNA
13046	13773		1.44	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
4	13125	26023	2.64	0.0E+00	AA228126.1	EST_HUMAN	z58c04.1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:667590 5' similar to TR:G222811
4	13125	26024	2.64	0.0E+00	AA228126.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
8	13128	26028	2.59	0.0E+00	4885136	NT	Homo sapiens checkpoint suppressor 1 (CHES1), mRNA
16	13136	26034	0.66	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
16	13136	26035	0.66	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
23	13143	26042	1.8	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
23	13143	26043	1.8	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
29	13149	26048	51.1	0.0E+00	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
38	13198	26060	0.87	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
42	13182	26065	4.86	0.0E+00	6857825	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNPS1), mRNA
59	13178	26090	2.13	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
59	13178	26091	2.13	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
61	13180	26095	1.27	0.0E+00	D78804.1	EST_HUMAN	HUM516H08B Human placenta polyA+ (TFujiwara) Homo sapiens cDNA clone GEN-516H08 5'
61	13180	26096	1.27	0.0E+00	D78804.1	EST_HUMAN	HUM516H08B Human placenta polyA+ (TFujiwara) Homo sapiens cDNA clone GEN-516H08 5'
62	13181	26097	25.34	0.0E+00	L16558.1	NT	Human ribosomal protein L7 (RPL7) mRNA, complete cds
64	13183	26100	11.49	0.0E+00	AW069534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
64	13183	26101	11.49	0.0E+00	AW069534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
68	13186	26115	1.16	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
76	13193	26115	4.06	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
76	13193	26116	4.06	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
79	13193	26115	2.97	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
79	13193	26116	2.97	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
							Homo sapiens amiloride binding protein 1 (amine oxidase (copper-containing)) (ABP1), nuclear gene encoding mitochondrial protein, mRNA
82	13198	26122	0.79	0.0E+00	4501850	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
83	13199	26131	16.85	0.0E+00	4504444	NT	Homo sapiens actin, beta (ACTB) mRNA
91	13207	26131	80.76	0.0E+00	5016098	NT	Human polyhomeotic 1 homolog (HPH1) mRNA, partial cds
94	13210	26134	16.95	0.0E+00	U89277.1	NT	HA1347 Human fetal liver cDNA library Homo sapiens cDNA
101	13217	26141	2.55	0.0E+00	A1114743.1	EST_HUMAN	Homo sapiens mRNA for KIAA1363 protein, partial cds
102	13218	26142	1.19	0.0E+00	AB037784.1	NT	ts38b05.x1 NCL_CGAP_U14 Homo sapiens cDNA clone IMAGE:230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR.
116	13227	26151	0.63	0.0E+00	A1623701.1	EST_HUMAN	ts38b05.x1 NCL_CGAP_U14 Homo sapiens cDNA clone IMAGE:230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR.
117	13227	26151	0.78	0.0E+00	A1623701.1	EST_HUMAN	ts38b05.x1 NCL_CGAP_U14 Homo sapiens cDNA clone IMAGE:230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR.
118	15809	26152	0.64	0.0E+00	N36040.1	EST_HUMAN	yy01h09.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:270017 5'
118	15809	26153	0.64	0.0E+00	N36040.1	EST_HUMAN	yy01h09.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:270017 5'
121	13230	26158	0.65	0.0E+00	4505458	NT	Homo sapiens neuropilin 2 (NRP2) mRNA
131	13236	26166	5.49	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
131	13236	26167	5.49	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
139	13474	26407	0.65	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FCGAMMA)BP mRNA
141	13244	26174	0.85	0.0E+00	T56946.1	EST_HUMAN	ye83g04.r2 Stratagene fetal spleen (#937205) Homo sapiens cDNA clone IMAGE:68310 5'
141	13244	26175	0.85	0.0E+00	T56946.1	EST_HUMAN	ye83g04.r2 Stratagene fetal spleen (#937205) Homo sapiens cDNA clone IMAGE:68310 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
154	13267		54.2	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
158	13261	26188	4.4	0.0E+00	BF036881.1	EST_HUMAN	601460375F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863803 5'
160	13263		39.14	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
163	13266	26191	0.92	0.0E+00	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
165	13268	26192	0.74	0.0E+00	BE295973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529884 5'
166	13268	26192	1.17	0.0E+00	BE295973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529884 5'
167	13269	26193	2.37	0.0E+00	W73973.1	EST_HUMAN	z482505.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:346201 5' similar to
168	13270	26194	0.85	0.0E+00	BE162832.1	EST_HUMAN	9bX16282_cds1 ZINC FINGER PROTEIN CLONE 647 (HUMAN);
168	13270	26195	0.85	0.0E+00	BE162832.1	EST_HUMAN	QV3-HT0457-140200-088-404 HT0457 Homo sapiens cDNA
169	13271	26196	1.59	0.0E+00	AF244088.1	NT	QV3-HT0457-140200-088-404 HT0457 Homo sapiens cDNA
172	13274	26199	14.16	0.0E+00	AL163202.2	NT	Homo sapiens zinc finger protein mRNA, complete cds
172	13274	26200	14.16	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
182	13282	26207	4.87	0.0E+00	BE018970.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C002
182	13282	26208	4.87	0.0E+00	BE018970.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z
187	13287	26211	4.35	0.0E+00	AB018327.1	NT	CE22631;
187	13287	26212	4.35	0.0E+00	AB018327.1	NT	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z
188	13288	26213	3.08	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
188	13288	26214	3.06	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
196	13297	26225	296.4	0.0E+00	D50659.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
200	13301	26229	4.35	0.0E+00	AF273045.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
200	13301	26230	4.35	0.0E+00	AF273045.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
202	13303	26232	3.93	0.0E+00	AF167174.1	NT	Homo sapiens CTCL tumor antigen se14-3 mRNA, complete cds
202	13303	26233	3.93	0.0E+00	AF167174.1	NT	Homo sapiens CTCL tumor antigen se14-3 mRNA, complete cds
211	15835	26239	51.32	0.0E+00	A1587308.1	EST_HUMAN	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
211	15835	26240	51.32	0.0E+00	A1587308.1	EST_HUMAN	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
213	13313	26242	1.57	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
216	13316		43.74	0.0E+00	4509632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
217	13317		6.46	0.0E+00	AF132000.1	NT	Homo sapiens TADA1 protein mRNA, complete cds
223	13323	26248	1.5	0.0E+00	AB018264.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
224	13323	26248	1.81	0.0E+00	AB018294.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
225	13324	26249	3.11	0.0E+00	6878444	NT	Mus musculus testis-specific protein, Y-encoded-like (Tspy), mRNA
239	13338	26264	3.14	0.0E+00	5453805	NT	Homo sapiens NS1-associated protein 1 (NSAP1) mRNA
240	13339		6.19	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
247	13344	26269	3.48	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
249	13346	26272	2.06	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
257	13354		9.67	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
269	13365	26290	1.2	0.0E+00	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
269	13365	26291	1.2	0.0E+00	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
271	13367	26293	3.56	0.0E+00	7706028	NT	Homo sapiens hypothetical protein (LOC51250), mRNA
282	13377		1.55	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
283	13378	26306	1.75	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
283	13378	26307	1.75	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
284	13379		0.98	0.0E+00	AW845293.1	EST_HUMAN	IL2-CT0031-181199-020-B03 CT0031 Homo sapiens cDNA
293	13387	26314	7.75	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
293	13387	26315	7.75	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
304	13398	26325	3.68	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
305	13399	26326	15.06	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
306	15838		12.15	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
307	13400	26327	0.8	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
308	13401		1.85	0.0E+00	AA480002.1	EST_HUMAN	zv18c06.r1 Scores_NHHMPu_S1 Homo sapiens cDNA clone IMAGE:753994 5'
309	13402	26328	23.16	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
310	13402	26328	22.55	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
314	13406	26332	1.78	0.0E+00	AF114498.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
327	13418	26341	2.84	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
327	13418	26342	2.84	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
328	13419	26343	4.94	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
329	13419	26343	1.14	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
344	13433	26355	0.86	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog), translocated to, 4 (MLLT4) mRNA
345	13434	26356	2.48	0.0E+00	4505256	NT	Homo sapiens moesin (MSN), mRNA
348	13437	26360	3.07	0.0E+00	4827057	NT	Homo sapiens X-box binding protein 1 (XBP1) mRNA
351	13440	26365	1.24	0.0E+00	U71600.1	NT	Human zinc finger protein zfp31 (zfp31) mRNA, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
356	13444	26369	2.54	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
356	13444	26370	2.54	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
357	15839	26371	2.87	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
359	13446	26373	0.87	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
361	13448	26376	0.9	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
362	13449	26377	1.91	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
363	13449	26377	1.41	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
365	13451	26378	0.63	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
376	13460	26390	2.41	0.0E+00	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLAGE1000899 5'
387	13500	26433	7.69	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
388	13501	26434	2.78	0.0E+00	AJ363014.1	EST_HUMAN	q91h05.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2018457 3' similar to gb:X54199
392	13467	26397	2.89	0.0E+00	AW754180.1	EST_HUMAN	PHOSPHORIBOSYLAMINE--GLYCINE LYASE (HUMAN);
395	13469	26400	1.3	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
396	13470	26401	2.24	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
396	13470	26402	2.24	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
397	13471	26403	1.22	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
398	13472	26404	1.27	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
398	13472	26405	1.27	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
399	13473	26406	3.09	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
400	13474	26407	0.67	0.0E+00	4503680	NT	Homo sapiens IgG Fe binding protein (FC(GAMMA)BP) mRNA
401	13475	26408	2.69	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
401	13475	26409	2.69	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
402	13475	26408	2.37	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
402	13475	26409	2.37	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
406	13479		25.89	0.0E+00	4506608	NT	Homo sapiens ribosomal protein L19 (RPL19) mRNA
420	13115	26013	1.44	0.0E+00	R17795.1	EST_HUMAN	yg09a02.r1 Soares infant brain TNIB Homo sapiens cDNA clone IMAGE:31652 5'
428	13502	26435	2.16	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylamidazole synthetase (GART) mRNA
429	13503		16.71	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
430	13504	26436	1.89	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
431	13505	26437	3.68	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
431	13505	26438	3.68	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
432	13506	26439	4.53	0.0E+00	AF183607.1	NT	Mus musculus truncated SON protein (Son) mRNA, complete cds

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
444	13517		1.27	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
446	13519	26452	6.45	0.0E+00	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
451	13524		0.75	0.0E+00	AA324282.1	EST_HUMAN	EST27054 Cerebellum II Homo sapiens cDNA 5' end
452	13525		1.25	0.0E+00	BE264447.1	EST_HUMAN	601111520F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352348 5'
468	13541	26466	3.47	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
468	13541	26467	3.47	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
474	13546	26475	2.84	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
474	13546	26476	2.84	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
484	13557	26482	2.68	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
485	13558	26483	6.81	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
485	13558	26484	6.81	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
494	13566	26489	3.92	0.0E+00	AB033035.1	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
496	13568	26491	1.83	0.0E+00	AU132898.1	EST_HUMAN	AU132898 NT2P4 Homo sapiens cDNA clone NT2RP4000837 5'
504	13576	26497	1.58	0.0E+00	BE385144.1	EST_HUMAN	601274951F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615756 5'
505	15842	26498	1.88	0.0E+00	AW939825.1	EST_HUMAN	PMO-DT0065-130400-002-c08 DT0065 Homo sapiens cDNA
508	13579	26500	1.47	0.0E+00	AL117233.1	NT	Novel human gene mapping to chromosome 1
509	13580	26501	0.9	0.0E+00	8923955	NT	Homo sapiens PC326 protein (PC326) mRNA
513	13584		0.82	0.0E+00	BF373403.1	EST_HUMAN	IL2-F10159-070800-120-F07 F10159 Homo sapiens cDNA
520	13591	26511	5.32	0.0E+00	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
527	15843	26515	1.15	0.0E+00	BE081527.1	EST_HUMAN	QV2-BT0635-160400-142-h05 BT0635 Homo sapiens cDNA
532	13603	26521	1.61	0.0E+00	BF028005.1	EST_HUMAN	601784858F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3996898 5'
538	13609	26528	2.23	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
541	13612	26531	10.84	0.0E+00	6006030	NT	Homo sapiens transcription elongation factor B (SII), polypeptide 1-like (TCEB1L) mRNA
542	13613	26532	4.46	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
542	13613	26533	4.46	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
544	13615	26535	0.99	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
545	13616	26536	1.2	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
545	13616	26537	1.2	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
550	13620		5.14	0.0E+00	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
558	13628	26546	1.55	0.0E+00	AW136324.1	EST_HUMAN	U1-H-B11-acb-h-04-001.1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2713951 3'
568	13638		2.54	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
588	13656	26571	2.72	0.0E+00	5174742	NT	Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCORF1), nuclear gene encoding mitochondrial protein, mRNA

Page 483 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
601	13688		15.19	0.0E+00	J04066.1	NT	Human apolipoprotein A-I (ApoA-I) gene, exon 1
604	13671	26585	1.83	0.0E+00	BF104898.1	EST_HUMAN	601822627F1 NIH_MGC 78 Homo sapiens cDNA clone IMAGE:4045447 5'
606	13673	26587	0.77	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
606	13673	26588	0.77	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
611	13676	26591	0.69	0.0E+00	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
616	13681	26597	1.9	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
616	13681	26598	1.6	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
623	13688	26605	1.86	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
625	13690	26608	1.53	0.0E+00	AB037807.1	NT	Homo sapiens mRNA for KIAA1386 protein, partial cds
627	13692	26609	0.85	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
628	13693	26610	1.55	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
628	13693	26611	1.55	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
629	13694	26612	1.34	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
629	13694	26613	1.34	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
636	13702	26623	1.35	0.0E+00	AA399486.1	EST_HUMAN	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
640	13706	26627	4.61	0.0E+00	D11078.1	NT	z60c07.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726732 5'
						NT	Homo sapiens RGH2 gene, retrovirus-like element
644	13710	26630	1.86	0.0E+00	W78811.1	EST_HUMAN	zh51b04.1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
						EST_HUMAN	zh51b04.1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
644	13710	26631	1.86	0.0E+00	W78811.1	EST_HUMAN	zh51b04.1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
647	13713		5.61	0.0E+00	4885526	NT	Homo sapiens novel SH2-containing protein 3 (NSP3), mRNA
654	13720	26643	2.78	0.0E+00	6006003	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B), mRNA
656	13722	26646	2.3	0.0E+00	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2), mRNA
659	13725	26650	3.11	0.0E+00	U05235.1	NT	Human neutral amino acid transporter (ASCT1) gene, exon 8
663	13729	26653	0.99	0.0E+00	AF108388.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1), mRNA, complete cds
663	13729	26654	0.99	0.0E+00	AF108388.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1), mRNA, complete cds
669	13734	26659	4.94	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX), mRNA
669	13734	26660	4.94	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX), mRNA
675	15846		3.3	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV8)
683	13746	26673	9.58	0.0E+00	4504424	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1), mRNA
688	13761	26677	4.6	0.0E+00	AB023012.1	NT	Homo sapiens mRNA for KIAA1089 protein, partial cds
696	13790	26692	17.63	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
						EST_HUMAN	np48d01.s1 NCL_CGAP_Br.1.1 Homo sapiens cDNA clone IMAGE:1129633 3' similar to gb:X57352 INTERFERON-INDUCIBLE PROTEIN 1-8U (HUMAN);
710	13772	26706	15.52	0.0E+00	AA614537.1	EST_HUMAN	

Page 484 of 546

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
714	13776	26710	4.91	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
714	13776	26711	4.91	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
724	13786	26720	2.21	0.0E+00	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
730	13791	26726	4.69	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
730	13791	26727	4.69	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
732	13793	26730	11.38	0.0E+00	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
738	13799	26738	2.31	0.0E+00	BE241577.1	EST_HUMAN	TCAAP1D0779 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0779
757	13817	26761	2.09	0.0E+00	AF226990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
757	13817	26762	2.09	0.0E+00	AF226990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
759	13819	26764	0.88	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
759	13819	26765	0.88	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
762	13822	26766	2.01	0.0E+00	AB037760.1	NT	Homo sapiens mRNA for KIAA1339 protein, partial cds
763	13823	26767	0.86	0.0E+00	8912749	NT	Homo sapiens zinc finger protein 212 (ZNF212), mRNA
768	13850	26769	3.03	0.0E+00	D30612.1	NT	Homo sapiens mRNA for repressor protein, partial cds
766	13825	26770	1.78	0.0E+00	BE669735.1	EST_HUMAN	601445847F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'
770	13829	26774	3.68	0.0E+00	R48915.1	EST_HUMAN	y68g08.r1 Soares breast 2Nbl-Hst Homo sapiens cDNA clone IMAGE:154048 5'
771	13830	26775	2.14	0.0E+00	5032086	NT	Homo sapiens splicing factor 3a, subunit 1, 120KD (SF3A1), mRNA
779	13838	26783	1.88	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
782	13842	26787	2.77	0.0E+00	7667965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
783	13852	26789	2.38	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
793	13852	26800	2.38	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
798	13857	26804	2.72	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
802	13861	26808	3.38	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
802	13861	26809	3.38	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
807	13865	26815	10.76	0.0E+00	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
808	13866		9.93	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
825	13883	26836	1.58	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
826	13884	26837	2.57	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
828	13886	26839	1.82	0.0E+00	4557686	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 1 (KCNE1) mRNA
834	13891	26845	3.12	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
834	13891	26846	3.12	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
835	13892	26847	1.34	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
840	13897	26852	2.16	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA

Page 485 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
844	13900	26857	1.23	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
844	13900	26858	1.23	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
851	13907		1.78	0.0E+00	AF027153.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
855	13911	26869	4.48	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
855	13911	26870	4.48	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
856	13912	26871	10.69	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
857	13913	26872	4.54	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
858	13914	26873	14.11	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S6 (RPS6) mRNA
862	13918	26876	1.18	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
862	13918	26877	1.18	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
863	13919	26878	1.8	0.0E+00	AA633272.1	EST_HUMAN	U66d07.s1 NCI_QGAP_P710 Homo sapiens cDNA clone IMAGE:397453
863	13919	26879	1.8	0.0E+00	AA633272.1	EST_HUMAN	U66d07.s1 NCI_QGAP_P710 Homo sapiens cDNA clone IMAGE:397453
864	13920		10.06	0.0E+00	BF677694.1	EST_HUMAN	602035579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:424915 5'
868	13924	26880	1.57	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
868	13924	26881	1.57	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
869	13925	26882	1.95	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
869	13925	26883	1.95	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
882	13947	26906	0.86	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
889	13954	26911	1.72	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
889	13954	26912	1.72	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
909	13964	26921	1.69	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
919	13973		63.74	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA
921	13973		24.73	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA
922	13975	26927	0.71	0.0E+00	AF089747.1	NT	Homo sapiens alpha-1-antitrypsin precursor, mRNA, partial cds
923	13976	26928	2.39	0.0E+00	L28101.1	NT	Homo sapiens kallistatin (Pl4) gene, exons 1-4, complete cds
925	13978	26930	0.64	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
926	13978	26931	0.94	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
926	13979	26932	0.63	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
926	13979	26933	0.63	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
946	13988	26950	2.66	0.0E+00	AB023211.1	NT	Homo sapiens mRNA for KIAA0994 protein, partial cds
946	13988	26951	2.66	0.0E+00	AB023211.1	NT	Homo sapiens mRNA for KIAA0994 protein, partial cds
952	14005	26957	0.88	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
953	14006	26958	8.74	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
954	14007	26959	0.72	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
955	14008	26960	0.83	0.0E+00	4507430	NT	Homo sapiens thyroidal embryonic factor (TEF), mRNA
955	14008	26961	0.83	0.0E+00	4507430	NT	Homo sapiens thyroidal embryonic factor (TEF), mRNA
953	15855	26968	2.24	0.0E+00	AI001948.1	EST_HUMAN	os98e03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613404 3'
953	15855	26969	2.24	0.0E+00	AI001948.1	EST_HUMAN	os98e03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613404 3'
965	14017	26971	10.17	0.0E+00	7657266	NT	Homo sapiens KIAA0929 protein Mx2 Interacting nuclear target (MINT) homolog (KIAA0929), mRNA
976	14027	26981	2.04	0.0E+00	AB030596.1	NT	Homo sapiens mRNA for PSP24, complete cds
984	14035	26987	1.86	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
984	14035	26988	1.86	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
984	14035	26989	1.86	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
986	14037	26992	3.55	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
986	14037	26993	3.55	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
995	14046	27000	2.25	0.0E+00	4757969	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
1006	14056	27008	1.17	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1007	14057	27009	13.38	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1008	14057	27009	10.52	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1011	14060		2.58	0.0E+00	AF198490.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1012	14060		5.29	0.0E+00	AF198490.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1016	14064	27015	1.28	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1017	14064	27015	1.82	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1018	14064	27015	1.71	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1019	14065	27016	1.65	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1022	14068	27019	2.42	0.0E+00	7661885	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1026	14072	27023	1.21	0.0E+00	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1027	14073		1.58	0.0E+00	AA458680.1	EST_HUMAN	aa86g07.s1 Striatagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838236 3' similar to SW:PR38_HUMAN P47210 26S PROTEASE REGULATORY SUBUNIT 8;
1030	14076	27027	0.76	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1030	14076	27028	0.76	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1031	14077	27029	1.2	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1031	14077	27030	1.2	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1034	14080		3.19	0.0E+00	8922933	NT	Homo sapiens hypothetical protein FLJ11106 (FLJ11106), mRNA
1049	14095	27046	2.4	0.0E+00	4758569	NT	Homo sapiens heat shock 70kD protein 98 (mortalin-2) (HSPA9B) mRNA

Page 487 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1066	14111	27060	2.13	0.0E+00	4826672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (GDH6) mRNA
1068	14111	27061	2.13	0.0E+00	4826672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (GDH6) mRNA
1070	14115	27065	3.18	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1070	14115	27066	3.18	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1071	14118	27067	28.45	0.0E+00	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
1073	14118		0.82	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1075	14120	27071	3.85	0.0E+00	5174384	NT	Homo sapiens alkylated repair; alkB homolog (ABH), mRNA
1084	14128	27082	1.91	0.0E+00	4758117	NT	Homo sapiens Death associated protein 3 (DAP3) mRNA
1098	14142	27092	2.82	0.0E+00	BE005208.1	EST_HUMAN	MR0-BN0115-200300-003-H08 BN0115 Homo sapiens cDNA
1121	14165	27116	5.54	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1121	14165	27117	5.54	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1134	14177	27127	0.96	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1134	14177	27128	0.96	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1135	14178	27129	33.54	0.0E+00	4506712	NT	Homo sapiens ribosomal protein S27a (RPS27A) mRNA
1137	14180	27131	2.34	0.0E+00	8923290	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
1140	14183	27134	8.07	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1142	14185	27135	20.89	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1143	14186	27136	5.23	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1143	14186	27137	5.23	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1147	14189	27140	1.84	0.0E+00	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51728), mRNA
1148	14190	27141	0.76	0.0E+00	XG5826.1	NT	H. sapiens ART4 gene
1148	14190	27142	0.76	0.0E+00	XG5826.1	NT	H. sapiens ART4 gene
1149	14191	27143	1.25	0.0E+00	A1147650.1	EST_HUMAN	qb22d10.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1697011 3'
1151	14193	27145	1.88	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1160	14202	27154	3.19	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1160	14202	27155	3.19	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1161	14203	27156	0.89	0.0E+00	9966844	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
1172	14213	27167	8.26	0.0E+00	7305076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1172	14213	27168	8.26	0.0E+00	7305076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1175	14216	27171	1.08	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1182	14223	27180	1.21	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1196	14236	27191	0.84	0.0E+00	AF073299.1	NT	Homo sapiens Na+/H+ exchanger isoform 2 (NHE2) mRNA, complete cds
1214	14252		1.24	0.0E+00	7657338	NT	Homo sapiens mult. (E. coli) homolog 3 (MLH3), mRNA
1230	14268	27225	1.18	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E- Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1230	14268	27226	1.18	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1231	14269	27227	1.6	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1232	15861	27228	1.7	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1251	14287	27253	6.18	0.0E+00	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
1252	14288	27254	0.99	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1262	14297	27250	0.73	0.0E+00	4505740	NT	Homo sapiens prefoldin 4 (PF4) mRNA
1271	14308		2.04	0.0E+00	Y18000.1	NT	Homo sapiens NF2 gene
1279	14314	27275	48.44	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1286	14321	27284	4.02	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSCR9) mRNA, complete cds
1292	14327	27288	1.08	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1292	14327	27289	1.08	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1303	14339	27302	2	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1303	14339	27303	2	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1303	14339	27304	2	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1304	14340		3.48	0.0E+00	AF098156.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1314	15863	27316	1.26	0.0E+00	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1314	15863	27317	1.26	0.0E+00	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1319	14354	27322	6.23	0.0E+00	5803148	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1320	14355	27323	0.81	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1322	14357	27324	6.58	0.0E+00	5803148	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1323	14358	27325	33.1	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1325	14360	27327	4.74	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
1326	14361	27328	5.7	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1327	14362	27329	9.47	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1328	14363	27330	5.14	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1328	14363	27331	5.14	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1340	14374	27344	2.17	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
1407	14440	27410	1.34	0.0E+00	AJ250014.1	NT	Homo sapiens mRNA for Familial Cylindromatosis cyd gene
1415	14448	27421	1.79	0.0E+00	A1208756.1	EST_HUMAN	qg38b06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837427 3' similar to WP.T27A1.5 CE14213
1416	14449	27422	32.54	0.0E+00	6042206	NT	RAN, member RAS oncogene family/Homo sapiens RAN, member RAS oncogene family (RAN), mRNA
1423	14456	27430	1.31	0.0E+00	4505646	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1423	14456	27431	1.31	0.0E+00	4505646	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA

Page 489 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1425	14458	27434	2.29	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1425	14458	27435	2.29	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1427	14480	27436	6.81	0.0E+00	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1434	14468	27445	2.91	0.0E+00	AF038280.1	NT	Homo sapiens alpha1-6fucosyltransferase (alpha1-6FucT) gene, exon 7
1447	14480	27458	1.01	0.0E+00	U35637.1	NT	Human nebulin mRNA, partial cds
1447	14480	27457	1.01	0.0E+00	U35637.1	NT	Human nebulin mRNA, partial cds
1457	14480	27464	3.14	0.0E+00	AL132699.1	NT	Novel human gene on chromosome 20
1459	14492	27465	2.5	0.0E+00	AL137764.1	NT	Novel human gene mapping to chromosome 1
1463	14496	27470	1.59	0.0E+00	D87077.1	NT	Human mRNA for KIAA0240 gene, partial cds
1468	14499	27473	5.36	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1468	14501	27475	1.7	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1468	14501	27476	1.7	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1468	14502		1.04	0.0E+00	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1513	14545	27516	2.11	0.0E+00	7709434	NT	Homo sapiens hHDC for homolog of Drosophila headcase (LOC51698), mRNA
1528	14561	27532	1.94	0.0E+00	AA481172.1	EST_HUMAN	ag34403.1 NC1 CGAP_GCB1 Homo sapiens cDNA clone IMAGE.815116 5'
1534	14567	27536	29.54	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1534	14567	27537	29.54	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1536	14569	27540	1.37	0.0E+00	AW976097.1	EST_HUMAN	EST388206 MAGE resequences, MAGN Homo sapiens cDNA
1536	14569	27541	1.37	0.0E+00	AW976097.1	EST_HUMAN	EST388206 MAGE resequences, MAGN Homo sapiens cDNA
1538	14571		2.22	0.0E+00	U76027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1539	14572	27544	2.25	0.0E+00	M18769.1	NT	Human T-cell receptor gamma chain VJCI-CII region mRNA, complete cds
1540	14573	27545	2.04	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (SPNMB) mRNA
1540	14573	27546	2.04	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (SPNMB) mRNA
1541	14574	27547	3.31	0.0E+00	7662405	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
1542	14575		7.04	0.0E+00	7666972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
1548	14581	27553	2.45	0.0E+00	M98476.1	NT	Human transglutaminase mRNA, complete cds
1551	14584	27555	1.24	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1551	14584	27556	1.24	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1552	15871		19.78	0.0E+00	4506654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
1553	14585	27557	26.31	0.0E+00	M14189.1	NT	Human laminin receptor (2H5 epitope) mRNA, 5' end
1563	14596	27571	0.94	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1563	14596	27572	0.94	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1565	14598	27573	10.15	0.0E+00	4503098	NT	Homo sapiens chondratin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1583	14616	27589	9.8	0.0E+00	Z83738.1	NT	H.sapiens HH2B/e gene
1584	14617	27590	1.81	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1584	14617	27591	1.81	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1585	14618	27592	12.62	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKBOFO2 5'
1585	14618	27593	12.62	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKBOFO2 5'
1588	14672	27596	2.54	0.0E+00	AB040805.1	NT	Homo sapiens mRNA for KIAA1472 protein, partial cds
1592	14624	27597	1.24	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1594	14626	27600	4.83	0.0E+00	7662183	NT	Homo sapiens KIAA0568 gene product (KIAA0568), mRNA
1594	14626	27601	4.83	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1596	14628	27602	26.28	0.0E+00	5729876	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1596	14628	27603	26.26	0.0E+00	5729876	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1598	14630	27605	1.56	0.0E+00	M91803.1	NT	Human sodium channel mRNA
1613	14645	27621	7.01	0.0E+00	H26973.1	EST_HUMAN	yo76c05.s1 Soares adult brain N2b4HB557 Homo sapiens cDNA clone IMAGE:183848 3'
1622	14655	27632	2.31	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1622	14655	27633	2.31	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1644	14676	27649	1.04	0.0E+00	AW444637.1	EST_HUMAN	UJ-H-BJ3-ajw-c-04-0-UJ.s1 NCI_OGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
1673	14705	27682	1.19	0.0E+00	BE144364.1	EST_HUMAN	MRO-HT0166-191199-004-b11 HT0166 Homo sapiens cDNA
1673	14705	27683	1.19	0.0E+00	BE144364.1	EST_HUMAN	MRO-HT0166-191199-004-b11 HT0166 Homo sapiens cDNA
1677	14709	27687	1.84	0.0E+00	AI768104.1	EST_HUMAN	wg81b07.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2371477 3' similar to TR:Q62788 Q62788 CYS2/HIS2 ZINC FINGER PROTEIN ;
1678	14710	27688	1.44	0.0E+00	4758513	NT	Homo sapiens hematopoietic-derived zinc finger protein (HD-ZNF1) mRNA
1679	14711	27689	3.61	0.0E+00	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
1683	14714	27693	1.72	0.0E+00	M29580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1683	14714	27694	1.72	0.0E+00	M29580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1685	14716	27696	1.53	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1686	14717	27697	2.12	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
1690	14721	27700	1.27	0.0E+00	BE222374.1	EST_HUMAN	hu11d05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166281 3' similar to TR:Q95147 Q95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;
1690	14721	27701	1.27	0.0E+00	BE222374.1	EST_HUMAN	hu11d05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166281 3' similar to TR:Q95147 Q95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;
1693	14723	27705	5.17	0.0E+00	H30132.1	EST_HUMAN	yo59a08.r1 Soares breast 3NbHBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYL-TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
1693	14723	27706	5.17	0.0E+00	H30132.1	EST_HUMAN	yo59a08.r1 Soares breast 3NbHBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYL-TRANSPEPTIDASE 5 PRECURSOR (HUMAN);

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1695	14725		0.94	0.0E+00	AI149880.1	EST_HUMAN	qf43f09.xt Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752809 3'
1696	14726	27708	7.26	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1696	14726	27709	7.26	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1699	14728	27721	28.3	0.0E+00	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1708	14739	27721	0.91	0.0E+00	AF169983.1	NT	Homo sapiens WNT16 protein (WNT16) mRNA, complete cds
1710	14740	27724	5.35	0.0E+00	8923841	NT	Homo sapiens FOXJ2 forkhead factor (LOC55810), mRNA
1713	14743	27727	1.03	0.0E+00	5453855	NT	Homo sapiens pericentriolar material 1 (PCM1) mRNA
1716	14746	27731	0.96	0.0E+00	M75980.1	NT	Human hepatocyte growth factor gene, exon 15
1716	14746	27732	0.96	0.0E+00	M75980.1	NT	Human hepatocyte growth factor gene, exon 15
1720	14750	27736	1.37	0.0E+00	4826973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1) mRNA
1728	14756	27743	20.03	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
1728	14758		2.59	0.0E+00	S94400.1	NT	TCR zeta [human, Genomic] mRNA, 365 nt, segment 1 of 8]
1737	14767	27752	0.97	0.0E+00	4557538	NT	Homo sapiens solute carrier family 26 (sulfate transporter), member 2 (SLC26A2) mRNA
1744	15876	27759	1.21	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
1760	14769	27775	2.63	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1800	15877		35.79	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1805	14833	27821	2.42	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1805	14833	27822	2.42	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1807	14835	27825	2.05	0.0E+00	U63963.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, and (SMF) gene, partial cds
1810	14838		1.32	0.0E+00	W7657.1	EST_HUMAN	zf66g09.r1 Soares_fetal_heart_NbH19W Homo sapiens cDNA clone IMAGE:345664 5'
1811	15878	27829	3.9	0.0E+00	4505332	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1812	14839	27830	1.13	0.0E+00	AA113030.1	EST_HUMAN	zn65c09.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563056 3'
1824	14851	27845	14.85	0.0E+00	U14987.1	NT	Human ribosomal protein L21 mRNA, complete cds
1826	14853	27848	5.94	0.0E+00	AB002331.1	NT	Human mRNA for KIAA0333 gene, partial cds
1827	14854	27849	6.64	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1827	14854	27860	6.64	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1827	14854	27851	6.64	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1851	14877	27872	6.56	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1851	14877	27873	6.56	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1881	14887	27883	1.34	0.0E+00	AB032978.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1881	14887	27884	1.34	0.0E+00	AB032978.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds

Page 492 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1865	14890	27886	3.28	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1865	14890	27887	3.28	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1866	14891	27888	6.86	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1866	14891	27889	6.86	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1869	14894	27892	1.48	0.0E+00	AW207280.1	EST_HUMAN	UI-H-B11-afn-f07-0-UI.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1869	14894	27893	1.48	0.0E+00	AW207280.1	EST_HUMAN	UI-H-B11-afn-f07-0-UI.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1892	14917	27912	3.46	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1892	14917	27913	3.46	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1936	14960	27956	0.93	0.0E+00	7657390	NT	Homo sapiens nuclear protein (NP220), mRNA
1936	14960	27957	0.93	0.0E+00	7657390	NT	Homo sapiens nuclear protein (NP220), mRNA
1939	14983	27959	2.02	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1939	14983	27960	2.02	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1948	14972		1.13	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1949	15881	27970	1.41	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1949	15881	27971	1.41	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1954	14977	27978	2.02	0.0E+00	4507484	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1954	14977	27979	2.02	0.0E+00	4507484	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1957	14979	27981	1.06	0.0E+00	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
1959	14981		5.63	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1964	14986		2.93	0.0E+00	M55632.1	NT	Human lipocortinase 1 pseudogene 1
1965	15882	27988	1.46	0.0E+00	5901905	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
1973	14994	27995	1.88	0.0E+00	4809282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1973	14994	27996	1.88	0.0E+00	4809282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1984	15005		0.9	0.0E+00	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
1986	15007	28010	1.81	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1986	15007	28011	1.81	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1987	15008	28012	2.97	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1987	15008	28013	2.97	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1997	15018	28025	1.05	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
1997	15018	28026	1.05	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2003	15024	28030	1.59	0.0E+00	M33782.1	NT	Human 1FEB protein mRNA, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2003	15024	28031	1.59	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
2005	15026	28032	1.29	0.0E+00	AW193024.1	EST_HUMAN	x69b01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2879913 3'
2005	15026	28033	1.29	0.0E+00	AW193024.1	EST_HUMAN	x69b01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2879913 3'
2006	15027	28034	6.19	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2006	15027	28035	6.19	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2008	15029	28037	1.33	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2009	15030	28038	1.36	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
2009	15030	28039	1.36	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
2016	15037	28048	3.07	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
2038	15055	28072	1.16	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2036	15055	28073	1.16	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2069	15086	28104	1.04	0.0E+00	7706742	NT	Homo sapiens TP53TG3a (TP53TG3a), mRNA
2074	15091	28108	0.92	0.0E+00	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
2075	15092	28109	4.79	0.0E+00	AU140831.1	EST_HUMAN	AU140831 PLACE4 Homo sapiens cDNA clone PLACE4000321 5'
2077	15094	28111	1.69	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2077	15094	28112	1.69	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2079	15096		3.79	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2081	15098		1.64	0.0E+00	4585863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2083	15100		1.7	0.0E+00	A1244247.1	EST_HUMAN	q90f08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:1988871 3' similar to contains Alu repetitive element;
2088	15105	28123	3.3	0.0E+00	BE877225.1	EST_HUMAN	601485148F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887747 5'
2089	15106	28124	1.88	0.0E+00	BF315325.1	EST_HUMAN	601902604F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2089	15106	28125	1.88	0.0E+00	BF315325.1	EST_HUMAN	601902604F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2093	15110	28129	2.38	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2093	15110	28130	2.38	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2098	15115	28136	2.35	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2098	15115	28137	2.35	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2103	15120	28141	2.29	0.0E+00	4758483	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
2122	15139		3.16	0.0E+00	BE767964.1	EST_HUMAN	QV1-GN0085-140800-318-c10 GN0085 Homo sapiens cDNA
2123	15140		1.29	0.0E+00	AF018963.1	NT	Homo sapiens X-linked juvenile retinoschisis protein (XLRS1) gene, exon 6 and complete cds
2125	15142	28159	3.87	0.0E+00	BF027562.1	EST_HUMAN	601672066F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954785 5'
2126	15143	28160	1.42	0.0E+00	BE072624.1	EST_HUMAN	PM0-BT0547-210300-004-F04 BT0547 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2128	15145	28161	1.26	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2131	15143	28163	2.85	0.0E+00	AW752708.1	EST_HUMAN	IL3-CT0219-271099-022-G10 CT0219 Homo sapiens cDNA
2133	15150	28165	4.92	0.0E+00	AI904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2133	15150	28166	4.92	0.0E+00	AI904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2191	15206		1.37	0.0E+00	L14787.1	NT	Human DNA-binding protein mRNA, 3' end
2196	15211	28229	0.93	0.0E+00	BE274996.1	EST_HUMAN	601122338F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346688 5'
2198	15213	28232	16.22	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBNBDE08 5'
2198	15213	28233	16.22	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBNBDE08 5'
2200	15215	28235	1.16	0.0E+00	AA931691.1	EST_HUMAN	cc32601.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1667896 3'
2204	15219	28239	32.02	0.0E+00	BF344434.1	EST_HUMAN	602014829F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4150734 5'
2205	15220	28240	25.7	0.0E+00	BE748899.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
2209	15224	28244	6.56	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2209	15224	28245	6.56	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2213	15887	28250	1.7	0.0E+00	BF313617.1	EST_HUMAN	601900281F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129622 5'
2216	15230	28253	1.26	0.0E+00	BE018750.1	EST_HUMAN	bb84e02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3049082 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN ;
2217	15231	28254	1.59	0.0E+00	AA042813.1	EST_HUMAN	z453c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFATORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2217	15231	28255	1.59	0.0E+00	AA042813.1	EST_HUMAN	z453c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFATORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2225	15239	28263	3.38	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2225	15239	28264	3.38	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2230	15244		1.57	0.0E+00	U36264.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
2252	15266	28268	7.38	0.0E+00	4557566	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
2258	15272	28297	1.33	0.0E+00	7662401	NT	Homo sapiens KIAA0962 protein (KIAA0962), mRNA
2264	15278	28303	2.29	0.0E+00	BE985281.1	EST_HUMAN	601433525F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918607 5'
2266	15280	28305	1.56	0.0E+00	BE905563.1	EST_HUMAN	601495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2266	15280	28306	1.56	0.0E+00	BE905563.1	EST_HUMAN	601495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2269	15282	28308	1.54	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
2308	15320	28340	1.32	0.0E+00	BF344756.1	EST_HUMAN	602014009F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4149770 5'
2308	15320	28341	1.32	0.0E+00	BF344756.1	EST_HUMAN	602014009F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4149770 5'
2309	15321	28342	4.01	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6), mRNA
2309	15321	28343	4.01	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6), mRNA

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2310	15322	28344	2.11	0.0E+00	AI076404.1	EST_HUMAN	oz09c07.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1674828 3'
2312	15324	28346	1.43	0.0E+00	AA428001.1	EST_HUMAN	z178a11.t1 Soares_fetal_spleen_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2312	15324	28347	1.43	0.0E+00	AA428001.1	EST_HUMAN	z178a11.t1 Soares_fetal_spleen_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2314	15326	28349	2.21	0.0E+00	BF347039.1	EST_HUMAN	602021846F1 NCL_CGAP_Brm87 Homo sapiens cDNA clone IMAGE:4157339 5'
2315	14572	27544	1.36	0.0E+00	M16768.1	NT	Human T-cell receptor gamma chain VJCI-CH-CLII region mRNA, complete cds
2320	15331	28365	1.09	0.0E+00	L02840.1	NT	Homo sapiens potassium channel Kv2.1 mRNA, complete cds
2321	15332	28366	1.57	0.0E+00	6325466	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3), mRNA
2327	15338	28361	1.83	0.0E+00	BE676095.1	EST_HUMAN	7122a02.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3295370 3' similar to TR:O94939 O94939 KIAA0857 PROTEIN;
2330	15341	28363	5.18	0.0E+00	AF044571.1	NT	Homo sapiens phosphatase kinase alpha subunit (PHKA2) gene, exon 32
2331	15342	28364	2.11	0.0E+00	AI625542.1	EST_HUMAN	167c08.x1 NCL_CGAP_U12 Homo sapiens cDNA clone IMAGE:2283182 3'
2336	15347	28368	1.76	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2336	15347	28369	1.76	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2342	15352	28372	1.44	0.0E+00	7662007	NT	Homo sapiens KIAA0218 gene product (KIAA0218), mRNA
2342	15352	28373	1.44	0.0E+00	7662007	NT	Homo sapiens KIAA0218 gene product (KIAA0218), mRNA
2346	15355	28377	0.97	0.0E+00	D83778.1	NT	Human mRNA for KIAA0194 gene, partial cds
2346	15355	28378	0.97	0.0E+00	D83778.1	NT	Human mRNA for KIAA0194 gene, partial cds
2356	15365	28386	3.77	0.0E+00	5174678	NT	Homo sapiens signal regulatory protein, beta, 1 (SIRP-BETA-1) mRNA
2360	15368	28390	1.86	0.0E+00	AU131142.1	EST_HUMAN	AU131142 NT2RP3 Homo sapiens cDNA clone NT2RP3002054 5'
2361	15369	28391	8.67	0.0E+00	BE794026.1	EST_HUMAN	601586843F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941003 5'
2362	15370	28391	1.23	0.0E+00	AW867076.1	EST_HUMAN	MR1-SN0033-120400-002-a04 SN0033 Homo sapiens cDNA
2363	15371	28392	3.7	0.0E+00	7662017	NT	Homo sapiens KIAA0244 protein (KIAA0244), mRNA
2364	15372	28393	2.27	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2364	15372	28394	2.27	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2365	15373		6.34	0.0E+00	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
2367	15375	28396	13.47	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2367	15375	28397	13.47	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2367	15375	28398	13.47	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2368	15376	28399	0.96	0.0E+00	8923083	NT	Homo sapiens hypothetical protein FLJ20081 (FLJ20081), mRNA
2424	15431	28453	1.11	0.0E+00	AU119582.1	EST_HUMAN	AU119582 HEMBA1 Homo sapiens cDNA clone HEMBA1006155 5'
2426	15433		4.37	0.0E+00	AI042035.1	EST_HUMAN	ox60b02.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1660683 3' similar to TR:O08662 O08662 230KDA PHOSPHATIDYLINOSITOL 4-KINASE..;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2429	15438		1.2	0.0E+00	BE885805.1	EST_HUMAN	601432608F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918168 5'
2439	15446		1.83	0.0E+00	AB005622.1	EST_HUMAN	AB0056222 HeLa cDNA (T.Noma) Homo sapiens cDNA similar to adenylyate kinase isozyme 2
2443	15449	28468	5.37	0.0E+00	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
2446	15451	28471	2.23	0.0E+00	D85606.1	NT	Homo sapiens gene for cholecystikinin type-A receptor, complete cds
2446	15451	28472	2.23	0.0E+00	D85606.1	NT	Homo sapiens gene for cholecystikinin type-A receptor, complete cds
2454	15459	28481	3.38	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2459	15463	28486	1.08	0.0E+00	BF345274.1	EST_HUMAN	602018058F1 NCI_CGAP_Brr67 Homo sapiens cDNA clone IMAGE:4153670 5'
2466	15470	28494	3.44	0.0E+00	5729777	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
2470	15474	28497	1.27	0.0E+00	BE831003.1	EST_HUMAN	CM0-MT0033-150600-428-h11 MT0033 Homo sapiens cDNA
2470	15474	28498	1.27	0.0E+00	BE831003.1	EST_HUMAN	CM0-MT0033-150600-428-h11 MT0033 Homo sapiens cDNA
2475	15479	28502	1.03	0.0E+00	U13666.1	NT	Human G protein-coupled receptor (GPR1) gene, complete cds
2475	15479	28503	1.03	0.0E+00	U13666.1	NT	Human G protein-coupled receptor (GPR1) gene, complete cds
2476	15480	28504	3.72	0.0E+00	BF569144.1	EST_HUMAN	602184558T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300383 3'
2488	15490	28514	2.12	0.0E+00	AW466922.1	EST_HUMAN	ha04h04.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2872759 3'
2488	15492	28515	3.03	0.0E+00	AW501010.1	EST_HUMAN	UI-HF-BP0p-als-c-07-0-UI-1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072780 5'
2513	15516		2.54	0.0E+00	AW813853.1	EST_HUMAN	RC3-ST0197-300300-018-c04 ST0197 Homo sapiens cDNA
2517	15520	28543	11.9	0.0E+00	BE795542.1	EST_HUMAN	601592530F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946518 5'
2518	15521	28544	1.43	0.0E+00	BF509482.1	EST_HUMAN	UI-H-BI4-aaz-b-08-0-UI.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086535 3'
2521	15524	28546	2.28	0.0E+00	Z32684.2	NT	Homo sapiens mRNA for membrane transport protein (Xk gene)
2523	15526		4.58	0.0E+00	5453871	NT	Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
2526	15529	28550	3.56	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2527	15530	28551	2.51	0.0E+00	U93239.1	NT	Human Sec62 (Sec62) mRNA, complete cds
2533	15536	28557	1.5	0.0E+00	BE86490.1	EST_HUMAN	601508211F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909866 5'
2538	15540	28563	6.2	0.0E+00	BE875511.1	EST_HUMAN	601489241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'
2538	15540	28564	6.2	0.0E+00	BE875511.1	EST_HUMAN	601489241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'
2539	15541	28565	1.07	0.0E+00	AF114027.1	EST_HUMAN	AF114027 Homo sapiens lung fetus Homo sapiens cDNA clone ESF6
2541	15543	28568	1.11	0.0E+00	AF245505.1	NT	Homo sapiens adiclan mRNA, complete cds
2558	15560	28576	1.25	0.0E+00	BE536921.1	EST_HUMAN	601064738F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451161 5'
2563	15584	28583	3.18	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001673 5'
2563	15584	28584	3.18	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001673 5'
2564	15565	28585	1.51	0.0E+00	BE292896.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987955 5'
2564	15565	28586	1.51	0.0E+00	BE292896.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987955 5'
2565	15566	28587	1.4	0.0E+00	BF223041.1	EST_HUMAN	7q27h12.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:3' similar to TR:O00246 O00246 HYPOTHETICAL 9.3 KD PROTEIN ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2568	15569	28589	8.56	0.0E+00	AF245505.1	NT	Homo sapiens adican mRNA, complete cds
2569	15590	28607	1.03	0.0E+00	BE266813.1	EST_HUMAN	601173631F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529159 5'
2606	15827	28629	2.15	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2606	15827	28630	2.15	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2607	15606		2.35	0.0E+00	BF513835.1	EST_HUMAN	U1-H-BW1-amp-1-12-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070631 3'
2611	15610	28634	1.01	0.0E+00	BF672818.1	EST_HUMAN	602152853F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293612 5'
2620	15618	28642	1.11	0.0E+00	AI571737.1	EST_HUMAN	tr19b08.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2168066 3' similar to gb:L20877
2621	15619	28643	2.57	0.0E+00	5032150	NT	CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE, BRAIN ISOFORM 2 (HUMAN);
2623	15622	28647	7.78	0.0E+00	AB037859.1	NT	Homo sapiens TA TA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF2I)
2624	15623	28648	1.25	0.0E+00	BE795445.1	EST_HUMAN	mRNA
2624	15623	28649	1.25	0.0E+00	BE795445.1	EST_HUMAN	Homo sapiens mRNA for KIAA1438 protein, partial cds
2634	15633		8.15	0.0E+00	BE792472.1	EST_HUMAN	Homo sapiens mRNA for KIAA1438 protein, partial cds
2642	15640	28664	2.66	0.0E+00	4504686	NT	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2653	15650		1.32	0.0E+00	U78027.1	NT	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2654	15651	28672	5.99	0.0E+00	AF173227.1	NT	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2658	15655	28673	110.09	0.0E+00	AB011108.1	NT	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2661	15658	28676	1.22	0.0E+00	AU133385.1	EST_HUMAN	601584930F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3939222 5'
2662	15659	28677	0.92	0.0E+00	M69225.1	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1) mRNA
2664	15661	28679	1.26	0.0E+00	AU130403.1	EST_HUMAN	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2664	15661	28680	1.26	0.0E+00	AU130403.1	EST_HUMAN	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2667	15664	28683	2.07	0.0E+00	AW887015.1	EST_HUMAN	Homo sapiens mRNA for KIAA0536 protein, partial cds
2670	15667	28686	1.12	0.0E+00	BF000018.1	EST_HUMAN	AU133385 NT2RP4 Homo sapiens cDNA clone NT2RP4001984 5'
2671	15668	28687	5.39	0.0E+00	BE383165.1	EST_HUMAN	Human bullous pemphigoid antigen (BPAG1) mRNA, complete cds
2672	15669		3.03	0.0E+00	BE531263.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2709	15703	28719	0.92	0.0E+00	AB037732.1	NT	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2732	15726		11.44	0.0E+00	AA316723.1	EST_HUMAN	RC1-OT0086-220300-011-d07 OT0086 Homo sapiens cDNA
2733	15727	28741	1.11	0.0E+00	BE794894.1	EST_HUMAN	7h15h05.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3316089 3'
2739	15733	28749	3.65	0.0E+00	U36253.1	NT	601298714F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628923 5'
2740	15734	28750	1.05	0.0E+00	7669517	NT	601276373F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610267 5'
2741	15735	28751	1.6	0.0E+00	AF110763.1	NT	Homo sapiens mRNA for KIAA1311 protein, partial cds
							Homo sapiens HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
							EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
							601589625F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943591 5'
							Human beta-prime-adaptin (BAM22) gene, exon 5
							Homo sapiens neuregulin 1 (NRG1), transcript variant SMDF, mRNA
							Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds

Page 498 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2748	15741	28758	9.77	0.0E+00	BE786376.1	EST_HUMAN	601591891F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945983 5'
2751	15903	28762	13.57	0.0E+00	BE563433.1	EST_HUMAN	601335485F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689564 5'
2752	15744		1.22	0.0E+00	AV721647.1	EST_HUMAN	AV721647 HTB Homo sapiens cDNA clone HTBBYE09 5'
2754	15746	28765	2.9	0.0E+00	5174496	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2754	15746	28766	2.9	0.0E+00	5174488	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2755	15747	28767	0.98	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2755	15747	28768	0.98	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2756	15748	28769	3.23	0.0E+00	AF290195.1	NT	Homo sapiens hypertension-related calcium-regulated gene mRNA, complete cds
2757	15749		48.84	0.0E+00	AV651066	EST_HUMAN	AV651066 GLC Homo sapiens cDNA clone GLCQD07 3'
2758	15750	28770	6.5	0.0E+00	BF377897.1	EST_HUMAN	GM1-TN0141-250900-439-508 TN0141 Homo sapiens cDNA
2758	15750	28771	6.5	0.0E+00	BF377897.1	EST_HUMAN	GM1-TN0141-250900-439-508 TN0141 Homo sapiens cDNA
2762	15754	28774	0.94	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2762	15754	28775	0.94	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2766	15758	28780	2.96	0.0E+00	BE747193.1	EST_HUMAN	601580903F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929472 5'
2779	15771		1.71	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2780	15772	28792	4.09	0.0E+00	BF514110.1	EST_HUMAN	U1-H.BW1-annw-e-07-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071340 3'
2786	15778		1.02	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2792	15784	28800	1.56	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2792	15784	28801	1.56	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2793	15785	28802	4.03	0.0E+00	BF677894.1	EST_HUMAN	60285579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249915 5'
2799	15791	28810	1.58	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
2803	15795	28813	15.3	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2803	15795	28814	15.3	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2805	15797		13.8	0.0E+00	A1879163.1	EST_HUMAN	au55d04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518663 5' similar to SW-IR13A_HUMAN P40428 60S RIBOSOMAL PROTEIN L13A ;
2808	15800	28819	2.83	0.0E+00	BF530681.1	EST_HUMAN	602071057F1 NCI_CGAP_Bn87 Homo sapiens cDNA clone IMAGE:4214879 5'
2809	15801	28820	3.53	0.0E+00	BE872788.1	EST_HUMAN	601450912F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854642 5'
2811	15803	28821	1.98	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002872 5'
2811	15803	28822	1.98	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002872 5'
2812	15804	28823	34.94	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960806 5'
2812	15804	28824	34.94	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960806 5'
2817	13290	26216	7.12	0.0E+00	S76830.1	NT	glycoprotein D=Duffy group antigen [human, blood, Genomic DNA, 3088 nt]
2820	15811		0.75	0.0E+00	AB033281.1	NT	Homo sapiens BTROP2 mRNA for F-box and WD-repeats protein isoform C, complete cds
2826	13786	26735	1.6	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds

Page 499 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2826	13796	28736	1.6	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2830	14088	27037	3.41	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2830	14088	27038	3.41	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2847	15907	28832	2.28	0.0E+00	X85980.1	NT	H. sapiens serine hydroxymethyltransferase pseudogene
2848	15908		3.02	0.0E+00	AF068624.1	NT	Homo sapiens 5-aminolevulinic acid synthase 2 (ALAS2) gene, complete cds
2850	15910		1.9	0.0E+00	AB040960.1	NT	Homo sapiens mRNA for KIAA1527 protein, partial cds
2852	15912	28835	1.07	0.0E+00	4502568	NT	Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP10) mRNA
2852	15912	28836	1.07	0.0E+00	4502568	NT	Homo sapiens caspase 10, apoptosis-related cysteine protease (CASP10) mRNA
2857	15917		0.98	0.0E+00	AJ238852.1	NT	Homo sapiens partial rpl3 gene for ribosomal protein L3, U82 snRNA, U83a snRNA and U83b snRNA genes
2858	15918	28839	3.25	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2862	15922	28842	1.6	0.0E+00	M80902.1	NT	Human AHNK nucleoprotein mRNA, 5' end
2865	15925	28844	0.98	0.0E+00	BE154504.1	EST_HUMAN	PMO-HT0343-281299-003-e02 HT0343 Homo sapiens cDNA
2865	15925	28845	0.98	0.0E+00	BE154504.1	EST_HUMAN	PMO-HT0343-281299-003-e02 HT0343 Homo sapiens cDNA
2867	15927		1.48	0.0E+00	X73428.1	NT	H. sapiens Id3 gene for HLH type transcription factor
2868	15928		3.61	0.0E+00	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
2870	15930	28847	1	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
2874	15933	28850	25.84	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2874	15933	28851	25.84	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2877	15936	28854	2.34	0.0E+00	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
2878	15937		5.17	0.0E+00	Y10658.1	NT	H. sapiens mRNA for nuclear DNA helicase II
2879	15938		1.17	0.0E+00	AF162303.1	NT	Homo sapiens protocadherin alpha C1 (PODH-alpha-C1) mRNA, complete cds
2880	15939	28855	61.62	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2880	15939	28856	61.62	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2891	15950	28866	2.45	0.0E+00	4507280	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2894	15953	28870	0.91	0.0E+00	AL047599.1	EST_HUMAN	DKFZ586G0621_r1 586 (synonym: huter) Homo sapiens cDNA clone DKFZ586G0621
2895	15954	28871	1.07	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2895	15954	28872	1.07	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2896	15955		2.07	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2898	15957	28874	5.43	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-h03 BT0636 Homo sapiens cDNA
2898	15957	28875	5.43	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-h03 BT0636 Homo sapiens cDNA
2903	15962	28883	0.63	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA

Page 500 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2903	15962	28894	0.63	0.0E+00	5808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
2906	15965	28888	2.52	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
2906	15965	28889	2.52	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
2907	15966	28890	0.94	0.0E+00	AA215579.1	EST_HUMAN	z96b11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683517 3' similar to contains Alu repetitive element
2915	15973		4.07	0.0E+00	Y19210.1	NT	Homo sapiens hHb5 gene for hair keratin, exons 1 to 9
2918	15976	28900	1.17	0.0E+00	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
2919	15977	28901	23.04	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2920	15978	28902	0.92	0.0E+00	AI561002.1	EST_HUMAN	tn18d07.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2167981 3' similar to TR:O16247
2920	15978	28903	0.92	0.0E+00	AI561002.1	EST_HUMAN	tn18d07.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2167981 3' similar to TR:O16247
2922	15980	28905	0.97	0.0E+00	AF152338.1	NT	O16247 F44E7.2 PROTEIN ;
2931	15989	28910	1.26	0.0E+00	AI209084.1	EST_HUMAN	qg49f0.4.X1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838527 3' similar to SW:CB20_HUMAN F52298 20 KD NUCLEAR CAP BINDING PROTEIN ;
2939	15997	28918	2.92	0.0E+00	AB033093.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
2939	15997	28919	2.92	0.0E+00	AB033093.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
2940	15998	28920	4.91	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2940	15998	28921	4.91	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2943	16001	28924	2.56	0.0E+00	7661903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2943	16001	28925	2.56	0.0E+00	7661903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2944	16002	28926	2.73	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLL T4) mRNA
2944	16002	28927	2.73	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLL T4) mRNA
2956	16014	28941	2.36	0.0E+00	4505084	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2956	16014	28942	2.36	0.0E+00	4505084	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2965	16023	28948	1.71	0.0E+00	4758827	NT	Homo sapiens neurxin III (NRXN3) mRNA
2966	16024		1.03	0.0E+00	X98494.1	NT	H. sapiens mRNA for M phase phosphoprotein 10
2971	16029	28952	7.63	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2985	16043		1.1	0.0E+00	AI149880.1	EST_HUMAN	qf43f09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1762809 3'
2994	16052	28973	0.97	0.0E+00	4506118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
2995	16053	28974	2.71	0.0E+00	AB004884.1	NT	Homo sapiens mRNA for PKU-alpha, partial cds
3007	16065	28984	1.51	0.0E+00	7662273	NT	Homo sapiens KIAA0737 gene product (KIAA0737), mRNA

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3008	16068	28985	1.98	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3008	16068	28986	1.96	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3016	16074	28994	0.95	0.0E+00	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3016	16074	28995	0.95	0.0E+00	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
3038	16098		0.74	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3040	16098	29014	1.28	0.0E+00	MT4039.1	NT	Human displacement protein (GCAAT) mRNA
3050	16107	29021	0.88	0.0E+00	4506882	NT	Homo sapiens semenogelin 1 (SEMG1) mRNA
3052	16109	29023	0.76	0.0E+00	AW976266.1	EST_HUMAN	EST388375 MAGE resequences, MAGN Homo sapiens cDNA
3057	16114		4.37	0.0E+00	AF195933.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
3060	16117	29031	15.24	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3060	16117	29032	15.24	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3062	16119		6.14	0.0E+00	AL359403.1	NT	Isoform 2 of a novel human mRNA from chromosome 22
3066	16123	29036	2.48	0.0E+00	AF017433.1	NT	Homo sapiens putative transcription factor CR53 (CR53) mRNA, partial cds
							Homo sapiens transcription factor (GHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel α_2
3069	16126		1.66	0.0E+00	AF196779.1	NT	Homo sapiens chloride channel CLC4 (ClC4) mRNA, complete cds
3084	16141	29052	0.73	0.0E+00	AF170492.1	NT	Human germ-line gene 16.1 for Ig lambda L-chain C region (Igl-C16.1)
3092	16150	29064	12.69	0.0E+00	X03629.1	NT	Homo sapiens F-box protein FBL5 (FBL5) mRNA, complete cds
3098	16155		1.77	0.0E+00	AF199355.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
3102	16159	29071	1.71	0.0E+00	AF084599.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3123	16180	29090	4.2	0.0E+00	AF265208.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3124	16181	29091	4.88	0.0E+00	AF149773.1	NT	Homo sapiens KIAA0469 gene product (KIAA0469), mRNA
3129	16186	29095	2.83	0.0E+00	7662139	NT	Homo sapiens olfactory receptor-like protein (OLFR 42B) gene, OLFR 42B-9110 allele, partial cds
3130	16187	29096	1.56	0.0E+00	AF042075.1	NT	Homo sapiens olfactory receptor-like protein (OLFR 42B) gene, OLFR 42B-9110 allele, partial cds
							Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3157	16213	29128	4.32	0.0E+00	4826783	NT	Human ferritin heavy chain mRNA, complete cds
3165	16220	29135	22.34	0.0E+00	L20941.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3168	16223	29138	1.3	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3168	16223	29139	1.3	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
							ye32f03.61 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:119453 3' similar to SP-S28539
3174	16229	29145	21.23	0.0E+00	T94870.1	EST_HUMAN	S28539 BASIC PROTEIN, 23K - ;
3190	16245	29163	1.13	0.0E+00	BF243336.1	EST_HUMAN	601878507F1 NIH_MGC 55 Homo sapiens cDNA clone IMAGE:4107433 5'
3192	16247	29164	1.11	0.0E+00	AI98086.1	EST_HUMAN	wu12h10.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2516803 3'
3197	16252	29171	4.28	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3197	16252	29172	4.28	0.0E+00	X98922.1	NT	H.sapiens mRNA for gamma-glutamyltransferase
3207	16262	29183	1.18	0.0E+00	4758827	NT	Homo sapiens neuraxn III (NRXN3) mRNA
3207	16262	29184	1.16	0.0E+00	4758827	NT	Homo sapiens neuraxn III (NRXN3) mRNA
3213	16268	29191	9.61	0.0E+00	4504658	NT	Homo sapiens interleukin 1 receptor, type I (IL1R1) mRNA
3230	16285	29208	3.9	0.0E+00	M28698.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
3234	16289	29211	1.55	0.0E+00	4502098	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3240	16295	29219	0.98	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3240	16295	29220	0.98	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3242	16297	29221	3.35	0.0E+00	AA774783.1	EST_HUMAN	ae87b1.1 s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:971133 3'
3250	16305	29229	3.58	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3250	16305	29230	3.58	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3261	16315	29235	1.15	0.0E+00	4557590	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3267	16321	29243	1.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3275	16329	29250					Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G+1, helicase (SKI2W), RD, complement factor B (BF), and complement component C2 (C2) genes.>
3278	16332	29253	1.04	0.0E+00	AF019413.1	NT	Homo sapiens very large G-protein coupled receptor-1 (VLGR1) mRNA, complete cds
3288	16312	29261	4.45	0.0E+00	AF055084.1	NT	Homo sapiens A kinase (PKA) anchor protein 1 (AKAP1), mRNA
3288	16312	29261	2.4	0.0E+00	4502014	NT	Homo sapiens A kinase (PKA) anchor protein 1 (AKAP1), mRNA
3288	16312	29262	2.4	0.0E+00	4502014	NT	Homo sapiens A kinase (PKA) anchor protein 1 (AKAP1), mRNA
3303	16356	29275	2.99	0.0E+00	AF265208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3304	16357	29276	0.86	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
3335	16386	29307					t58f08.x2 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2222535 3' similar to SW:RL11_RAT
3343	16394	29315	2.87	0.0E+00	AI589294.1	EST_HUMAN	P25121 60S RIBOSOMAL PROTEIN L11, contains Alu repetitive element
3343	16394	29315	2.44	0.0E+00	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3343	16394	29316	2.44	0.0E+00	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3344	16395	29317	0.85	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3344	16395	29318	0.85	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3346	16397	29319	1.11	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3346	16397	29320	1.11	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3349	16400	29322	10.77	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
3351	16402	29324	1.09	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
3358	16408	29330	0.85	0.0E+00	BE779039.1	EST_HUMAN	601484995F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3688246 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3389	16419	29344	0.79	0.0E+00	AI832569.1	EST_HUMAN	wb10f04.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2305278 3' similar to TR:Q91929 Q91929 ZINC FINGER PROTEIN. ;
3407	16458	29379	4.18	0.0E+00	AU123664.1	EST_HUMAN	AU123664 NT2RM2 Homo sapiens cDNA clone NT2RM2000735 5'
3414	16462	29382	1.15	0.0E+00	7363436	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3414	16462	29383	1.15	0.0E+00	7363436	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3417	16465	29385	6.29	0.0E+00	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
3418	16468	29386	1.51	0.0E+00	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1I-a isoform (CACNA1I) mRNA, complete cds
3436	16483	29401	1.13	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3436	16483	29402	1.13	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3437	16484	29403	1.05	0.0E+00	4502398	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
3441	16488	29406	2.77	0.0E+00	5903067	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA
3450	15735	28751	1.38	0.0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
3455	16501	29419	2.15	0.0E+00	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
3456	16502	29420	1.05	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3458	16502	29421	1.05	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3459	16505	29425	1	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
3459	16505	29426	1	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
3460	16506	29427	5.55	0.0E+00	K02380.1	NT	Bacteriophage P1 replication region including repA, parA, and parB genes and IncA, IncB, and IncC incompatibility determinants
3463	16509	29430	1.31	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
3469	16515	29435	6.12	0.0E+00	AI835159.1	EST_HUMAN	wp14d10.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2464819 3' similar to TR:O73634 O73634 NEURAL CELL ADHESION MOLECULE. ;
3469	16515	29436	5.12	0.0E+00	AI835159.1	EST_HUMAN	wp14d10.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2464819 3' similar to TR:O73634 O73634 NEURAL CELL ADHESION MOLECULE. ;
3473	16519	29441	1.96	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
3479	16525	29449	6.24	0.0E+00	6552332	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3479	16525	29450	6.24	0.0E+00	6552332	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3485	16531	29456	1.06	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
3490	16536	29461	6.78	0.0E+00	U43293.1	NT	Human MDS1A (AML1/MDS1 fusion) mRNA, partial cds
3497	16544	29469	1.85	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3497	16544	29470	1.85	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3504	16551	29478	0.99	0.0E+00	AF231922.1	NT	Homo sapiens chromosome 21 unknown mRNA

Page 504 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3516	16562	29486	2.29	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3516	16562	29487	2.29	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3519	16565	29490	1.07	0.0E+00	4826795	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2) mRNA
3521	16567	29491	1.24	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3526	16572	29495	0.88	0.0E+00	AI384007.1	EST_HUMAN	1e35g12.x1 Soares_NhIMPu_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR:000498
3529	16575	29498	1.08	0.0E+00	M10976.1	NT	O00498 MYASTHENIA GRAVIS AUTOANTIGEN GRAVIN ; Human endogenous retroviral DNA (4-1), complete retroviral segment
3543	16589	29513	0.92	0.0E+00	AB032979.1	NT	Homo sapiens mRNA for KIAA1153 protein, partial cds
3543	16589	29514	0.92	0.0E+00	AB032979.1	NT	Homo sapiens mRNA for KIAA1153 protein, partial cds
3551	16597	29522	1.38	0.0E+00	AV701869.1	EST_HUMAN	AV701869 ADB Homo sapiens cDNA clone ADBDAH06 5'
3552	16598	29523	0.92	0.0E+00	4506884	NT	Homo sapiens semenogelin II (SEMG2) mRNA
3554	16600		1.03	0.0E+00	AF078868.1	NT	Homo sapiens homologous yeast-44.2 protein mRNA, complete cds
3563	16609	29531	0.82	0.0E+00	AL133204.1	NT	Novel human gene mapping to chromosome X
3567	16612	29534	1.21	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3578	16623	29544	1.33	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
3588	16633	29552	1.16	0.0E+00	6997248	NT	Homo sapiens sad (Drosophila)-like 1 (SALL1), mRNA
3590	16635	29555	1.06	0.0E+00	6325463	NT	Homo sapiens sad (Drosophila)-like 1 (SALL1), mRNA
3595	16640		4.69	0.0E+00	AW852217.1	EST_HUMAN	Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA
3602	16647		1.35	0.0E+00	AF118846.1	NT	QV0-CT0225-230300-169-e01 CT0225 Homo sapiens cDNA
3603	16648	29564	10.61	0.0E+00	BF676393.1	EST_HUMAN	Homo sapiens gamma-glutamylcysteine synthetase (GLCLC) gene, partial cds
3617	16661	29579	1.04	0.0E+00	AW937977.1	EST_HUMAN	QV0-DT0047-170200-123-g01 DT0047 Homo sapiens cDNA
3629	16672	29585	1.48	0.0E+00	BF672054.1	EST_HUMAN	602152486F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293645 5'
3629	16672	29586	1.46	0.0E+00	BF672054.1	EST_HUMAN	602152486F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293645 5'
3630	16673		0.84	0.0E+00	4826967	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
3632	16675	29588	0.84	0.0E+00	AW664693.1	EST_HUMAN	h184g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979024 3'
3632	16675	29589	0.84	0.0E+00	AW664693.1	EST_HUMAN	h184g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979024 3'
3636	16679	29593	0.83	0.0E+00	4826783	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 1 (HS3ST1) mRNA
3638	16681	29596	1.03	0.0E+00	7662319	NT	Homo sapiens KIAA0808 gene product (KIAA0808), mRNA
3646	16689	29604	0.97	0.0E+00	4557752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1) mRNA
3646	16689	29605	0.67	0.0E+00	4557752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1) mRNA
3661	16704	29618	3.11	0.0E+00	D87327.1	NT	Homo sapiens mRNA for G protein-coupled inward rectifier potassium channel, complete cds
3684	16707		10.78	0.0E+00	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
3681	16724	29637	16.15	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3685	16728	29639	4.02	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3685	16728	29640	4.02	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3692	16735	29647	1.6	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3692	16735	29648	1.6	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3695	16738	29651	1.34	0.0E+00	AW851714.1	EST_HUMAN	MR2-CT0222-281099-005-e05 CT0222 Homo sapiens cDNA
3697	16740	29653	2.88	0.0E+00	5729828	NT	Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA
3699	16742	29655	1.37	0.0E+00	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
3701	16744	29657	0.72	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3703	16748	29659	1.45	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
3703	16748	29660	1.45	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
3705	16748	29662	1	0.0E+00	7662237	NT	Homo sapiens KIAA0670 protein (KIAA0670), mRNA
3705	16748	29663	1	0.0E+00	7662237	NT	Homo sapiens KIAA0670 protein (KIAA0670), mRNA
3719	16762	29672	4.6	0.0E+00	AW298134.1	EST_HUMAN	U1-H-BW0-ajs-e-12-0-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:27330223
3719	16762	29673	4.6	0.0E+00	AW298134.1	EST_HUMAN	U1-H-BW0-ajs-e-12-0-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:27330223
3742	16784	29696	1.47	0.0E+00	AB004630.1	NT	Human gene for Type XIX collagen $\alpha 1$ chain, exon 6
3743	16785	29697	1.06	0.0E+00	AA463659.1	EST_HUMAN	aa06g01.t1 Soares_NihHMPu_S1 Homo sapiens cDNA clone IMAGE:812496 5' similar to SW:KR84_SHEEP P02445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, IIIB4, [1];
3747	16789	29701	0.76	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3750	16792	29703	3.92	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3760	16801	29713	0.77	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3772	16814	29723	5.84	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3775	16817	29726	19.76	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
3781	16822	29728	0.97	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3781	16822	29730	0.97	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3784	16825	29733	0.92	0.0E+00	4505594	NT	Homo sapiens plasminogen activator inhibitor, type II (arginine-serpin) (PAI2) mRNA
3834	16874	29775	3.15	0.0E+00	AF179733.1	NT	Pan troglodytes olfactory receptor (PTR208) gene, partial cds
3837	16877	29779	2.76	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3837	16877	29780	2.76	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3843	16883	29787	0.91	0.0E+00	AF127851.1	NT	Gorilla gorilla olfactory receptor (GGOT1) gene, partial cds
3843	16883	29788	0.91	0.0E+00	AF127851.1	NT	Gorilla gorilla olfactory receptor (GGOT1) gene, partial cds
3844	16884	29789	1.01	0.0E+00	AI377699.1	EST_HUMAN	ta62f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2091307 3'
3845	16885		1.81	0.0E+00	AF152496.1	NT	Homo sapiens probocadherin beta 3 (PCDH-beta3) mRNA, complete cds
3846	16886	29760	0.97	0.0E+00	4758189	NT	Homo sapiens desmoplakin (DPI, DP11) (DSP) mRNA

Page 506 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3850	16890	29794	16.29	0.0E+00	S78995.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, complete cds
3852	16892	29796	2.25	0.0E+00	7710148	NT	Homo sapiens methyl CpG binding protein 2 (MECP2), mRNA
3853	16893	29797	1.54	0.0E+00	7692183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3857	16897	29800	1.1	0.0E+00	4504534	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1D (HTR1D) mRNA
3862	16901	29805	1.15	0.0E+00	AB001523.1	NT	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds
3862	16901	29806	1.15	0.0E+00	AB001523.1	NT	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds
3863	16902	29807	0.77	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
3868	16907	29815	7.17	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3868	16907	29816	7.17	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3870	16909	29819	4.34	0.0E+00	U09412.1	NT	Human zinc finger protein ZNF134 mRNA, complete cds
3871	16910	29820	1.13	0.0E+00	AF114488.1	NT	Homo sapiens interseclin short isoform (ITSN) mRNA, complete cds
3874	16913	29822	1.29	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3877	16916	29825	1.3	0.0E+00	AF012615.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 11
3878	16917	29826	2.38	0.0E+00	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129), mRNA
3880	16919	29828	0.73	0.0E+00	AF099117.1	NT	Homo sapiens amphiphysin gene, partial cds
3889	16929	29838	2.34	0.0E+00	AI864727.1	EST_HUMAN	wk01f01.x1 NCL_OGAP_Lym12 Homo sapiens cDNA clone IMAGE:2411085 3' similar to TR:O43340 O43340 R28830.2; contains element PTR7 repetitive element;
3892	16932	29842	13.72	0.0E+00	4506742	NT	Homo sapiens ribosomal protein S8 (RPS8), mRNA
3897	16937	29848	1.39	0.0E+00	AL040338.1	EST_HUMAN	DKFZp434N0413_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0413 5'
3903	16943	29855	1.34	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3903	16943	29856	1.34	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3904	16944	29857	1.78	0.0E+00	4504138	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3) mRNA
3906	16946		1.75	0.0E+00	4505078	NT	Homo sapiens melanoma antigen, family B, 1 (MAGEB1) mRNA
3910	16950	29861	1.06	0.0E+00	AF149412.1	NT	Homo sapiens HBP17 heparin-binding and FGF-binding protein gene, complete cds
3924	16964	29877	1.17	0.0E+00	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
3928	16968	29881	1.3	0.0E+00	4585642	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
3936	16976	29890	1.64	0.0E+00	BF355295.1	EST_HUMAN	RC3-HT0860-170900-011-a12 HT0860 Homo sapiens cDNA
3937	16977	29891	1.05	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone lncyte 1996726 similar to MXRA5 Matrix remodeling associated gene 5
3937	16977	29892	1.05	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone lncyte 1996726 similar to MXRA5 Matrix remodeling associated gene 5
3947	16987	29902	1.85	0.0E+00	AF129533.1	NT	Homo sapiens F-box protein Fbl3b (FBL3B) mRNA, partial cds

Page 507 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptbr
3952	16992	29908	3.36	0.0E+00	BE378602.1	EST_HUMAN	60123696BF1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608800 5'
3961	17001	29916	1.06	0.0E+00	AW580740.1	EST_HUMAN	PM3-L T0031-100100-003-109 L T0031 Homo sapiens cDNA
4000	17039	29945	5.21	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
4000	17039	29946	5.21	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
4010	17049		3.56	0.0E+00	M23910.1	NT	Human MHC class II lymphocyte antigen DPw4-beta-2 pseudogene, exon 2
4013	17052		6.54	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
4022	17060	29981	3.12	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4031	17069	29970	1.59	0.0E+00	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4036	17074	29974	0.99	0.0E+00	S79653.1	NT	mrg-inas-related [human, Genomic, 2416 nt]
4047	17085		56.15	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4054	17091		1.47	0.0E+00	AI657076.1	EST_HUMAN	t55q08.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2244734 3' similar to TR:Q60309 O60309 KIAA0563 PROTEIN. ;
4057	17093	29988	1.13	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
4058	17094	29989	1.57	0.0E+00	U09366.1	NT	Human zinc finger protein ZNF133
4076	17111	30007	5.87	0.0E+00	AB015610.1	NT	Chlorobacterium aethiops mRNA for ribosomal protein S4X, complete cds
4085	17119		3.81	0.0E+00	AJ238617.1	NT	Homo sapiens mRNA for UGA suppressor tRNA-associated antigenic protein (IRNA48 gene)
4093	17127	30020	1.14	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4094	17128	30021	2.67	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
4094	17128	30022	2.67	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
4100	17134	30028	7.81	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4100	17134	30029	7.81	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4111	17145	30039	1.27	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase,
4117	17150	30042	4.96	0.0E+00	4885306	NT	phosphoribosylaminimidazole synthetase (GART) mRNA
4118	17151	30043	1.32	0.0E+00	AB006625.1	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA
4121	17154	30044	7.49	0.0E+00	11419287	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4122	17155	30045	2.95	0.0E+00	AL096857.1	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1), mRNA
4123	17156		1.21	0.0E+00	AA018975.1	EST_HUMAN	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4129	17162	30051	3.28	0.0E+00	AF165627.1	NT	ze55e09.1 Scores retina N2b4HR Homo sapiens cDNA clone IMAGE:362920 5' similar to contains Alu repetitive element
4138	14177	27127	1.92	0.0E+00	4826947	NT	Homo sapiens DGCR8 (DGCR8) mRNA, complete cds
4138	14177	27128	1.92	0.0E+00	4826947	NT	Homo sapiens protein kinase X-linked (PRKX) mRNA
4143	17175	30063	1.26	0.0E+00	5001805	NT	Homo sapiens protein kinase X-linked (PRKX) mRNA
4144	17176	30064	1.09	0.0E+00	4503954	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4144	17176	30065	1.09	0.0E+00	4503864	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
4146	16598	29523	0.86	0.0E+00	4506884	NT	Homo sapiens semenogelin II (SEMG2), mRNA
4148	17179	30067	0.8	0.0E+00	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4148	17179	30068	0.8	0.0E+00	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4163	17184	30071	0.66	0.0E+00	AB020702.1	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
4169	17190	30078	4.7	0.0E+00	A1982597.1	EST_HUMAN	wu04d04.x1 NCJ CGAP GC6 Homo sapiens cDNA clone IMAGE:2515975 3'
4169	17190	30079	4.7	0.0E+00	A1982597.1	EST_HUMAN	wu04d04.x1 NCJ CGAP GC6 Homo sapiens cDNA clone IMAGE:2515975 3'
4161	17192	30081	1.2	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-a02 HT0707 Homo sapiens cDNA
4161	17192	30082	1.2	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-a02 HT0707 Homo sapiens cDNA
4165	17196		3.98	0.0E+00	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867690 5'
4170	17201	30087	0.93	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4170	17201	30088	0.93	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4172	17203	30090	1.02	0.0E+00	4507476	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3), mRNA
4173	17204	30091	2.64	0.0E+00	5729725	NT	Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA
4174	17205		1.13	0.0E+00	AL132909.1	NT	Novel human gene on chromosome 20
4183	17214		5.1	0.0E+00	AW675599.1	EST_HUMAN	ba51104.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900095 3' similar to SW:TH12_BOVIN
4188	17219	30106	1.12	0.0E+00	AW408788.1	EST_HUMAN	Q95108 MITOCHONDRIAL THIOREDOXIN PRECURSOR ;
4190	17221	30109	1.23	0.0E+00	8922466	NT	U1-HF-BMD-adv-c-02-0-U1.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063147 5'
4190	17221	30110	1.23	0.0E+00	8922466	NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4200	17231		4.37	0.0E+00	5174632	NT	Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for egg jelly, sea urchin homolog)-like (PKDREJ), mRNA
4220	17249	30133	9.8	0.0E+00	AA401438.1	EST_HUMAN	zu88h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element ;
4220	17249	30134	9.8	0.0E+00	AA401438.1	EST_HUMAN	zu88h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element ;
4235	17264	30149	1.04	0.0E+00	4507720	NT	Homo sapiens titin (TTN), mRNA
4235	17264	30150	1.04	0.0E+00	4507720	NT	Homo sapiens titin (TTN), mRNA
4258	17287		0.87	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
4286	17315	30194	1.26	0.0E+00	AJ003145.1	NT	Homo sapiens mRNA for olfactory receptor protein, pseudogene
4302	17331	30211	2.19	0.0E+00	J02610.1	NT	Human apolipoprotein B-100 mRNA, complete cds
4317	17346	30230	0.87	0.0E+00	AW936899.1	EST_HUMAN	PM2-DT 0023-080300-004-a08 DT0023 Homo sapiens cDNA
4322	17351	30236	0.74	0.0E+00	4826827	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1), mRNA

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4322	17351	30237	0.74	0.0E+00	4826827	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4324	17353	30239	3.59	0.0E+00	AF174590.1	NT	Homo sapiens F-box protein Fbl4 (FBL4) mRNA, partial cds
4332	17360		2.53	0.0E+00	AI189844.1	EST_HUMAN	q023f06.x1 Soares_placenta_8to9weeks_2NbtHP8tc9W Homo sapiens cDNA clone IMAGE:1724579 3'
4336	17363		5.62	0.0E+00	U14520.1	NT	Human CBFA3 (Cbfa3) gene, partial cds
4347	17374	30254	0.92	0.0E+00	4505646	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
4353	17380	30261	0.77	0.0E+00	6563384	NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA
4353	17380	30262	0.77	0.0E+00	6563384	NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA
4359	17386	30268	1.15	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4359	17386	30269	1.15	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4369	17396	30275	9.53	0.0E+00	6912281	NT	Homo sapiens COMPLEMENT COMPONENT C1q RECEPTOR (C1QR), mRNA
4387	17415		1.12	0.0E+00	AF153047.2	NT	Homo sapiens gap junction protein connexin-36 (CX36) gene, complete cds
4392	17420	30303	11.19	0.0E+00	U03901.1	NT	Human Ig light chain VL1 region germline (humiv1c2c) gene, partial cds
4398	17426	30310	4.52	0.0E+00	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
4402	17430	30315	6.75	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4402	17430	30316	6.75	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4408	17436	30322	1.31	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4408	17436	30323	1.31	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4413	17440	30329	9.47	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4413	17440	30330	9.47	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4423	17450	30341	1.22	0.0E+00	X82338.1	NT	Homo sapiens Menkes disease gene, exon 4
4426	17453	30345	15	0.0E+00	4885128	NT	Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA
4427	17454	30346	1.23	0.0E+00	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region, segment 2/2
4430	17457	30348	1.01	0.0E+00	AB037781.1	NT	Homo sapiens mRNA for KIAA1360 protein, partial cds
4463	17489	30376	1.2	0.0E+00	7019458	NT	Homo sapiens myosin regulatory light chain interacting protein (MIR), mRNA
4471	17497		5.71	0.0E+00	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
4476	17502	30386	1.53	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4476	17502	30387	1.53	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4480	17505	30393	0.88	0.0E+00	W26179.1	EST_HUMAN	24g7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4480	17505	30394	0.88	0.0E+00	W26179.1	EST_HUMAN	24g7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4495	17520		2.47	0.0E+00	AF200628.1	NT	Homo sapiens HPS1 gene, intron 5
4514	17539	30424	0.63	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Col8-HAP-Ft Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1205 5'
4514	17539	30425	0.63	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Col8-HAP-Ft Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1205 5'

Page 510 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4517	17542		0.9	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
4529	17553	30441	3.45	0.0E+00	AW084964.1	EST_HUMAN	xc68e08.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:2589446 3' similar to SW:AHNK_HUMAN
4531	18318		1.85	0.0E+00	8051619	NT	Q09666 NEUROBLAST DIFFERENTIATION ASSOCIATED PROTEIN AHNAK ; Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2a, mRNA
4533	17556	30444	1.09	0.0E+00	AI696698.1	EST_HUMAN	wc66b02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2322603 3' similar to contains MER22.b2 PTR5 repetitive element ;
4537	17560		8.59	0.0E+00	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
4539	17582	30449	1.96	0.0E+00	AW381570.1	EST_HUMAN	PM1-HT0305-101198-002-d03 HT0305 Homo sapiens cDNA
4545	17568	30456	1.2	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4545	17568	30457	1.2	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4547	17570	30459	1.73	0.0E+00	4758467	NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
4548	17571	30460	2.8	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
4553	17576	30466	0.94	0.0E+00	Z66526.1	NT	H. sapiens pancreatic polypeptide receptor PP1 gene
4554	17577	30467	0.96	0.0E+00	4508952	NT	Homo sapiens sialyltransferase 8 (alpha-N-acetylneuraminatase: alpha-2,8-sialyltransferase, GD3 synthase) (SIAT8) mRNA
4559	17582	30473	0.93	0.0E+00	S78694.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon
4560	17583	30474	1.91	0.0E+00	AF111163.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, complete cds
4560	17583	30475	1.91	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4570	18319	30486	2.31	0.0E+00	6005973	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4575	17597	30491	6.31	0.0E+00	AF208161.1	NT	Homo sapiens zinc finger protein 195 (ZNF195), mRNA
4582	17604	30501	1.32	0.0E+00	5454175	NT	Homo sapiens synovial precursor, mRNA, complete cds
4595	17616	30510	30.53	0.0E+00	4503470	NT	Homo sapiens zinc finger protein 211 (ZNF211), mRNA
4605	17626	30518	1.62	0.0E+00	4503098	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4610	17631	30524	1.4	0.0E+00	4502556	NT	Homo sapiens chondroclatin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
4614	17635		2.89	0.0E+00	L35485.1	NT	Homo sapiens calcium/calmodulin-dependent protein kinase IV (CAMK4) mRNA
4616	17637	30528	13.95	0.0E+00	7662091	NT	Homo sapiens iduronate sulphate sulphatase (IDS) gene, complete cds
4616	17637	30527	13.95	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4632	17653	30540	1.97	0.0E+00	AF143314.1	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4635	17656	30543	10.93	0.0E+00	AJ245418.1	NT	Homo sapiens PTEN (PTEN) gene, exons 3 through 5
4635	17656	30544	10.93	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4637	17658	30545	1.21	0.0E+00	AB018338.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4645	17666		46.99	0.0E+00	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4654	17675		1.51	0.0E+00	AA174072.1	EST_HUMAN	zp18g08.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609854 3'
4656	17677		1.62	0.0E+00	7657410	NT	Homo sapiens cdz (odd Oz/ten-m. Drosophila) homolog 1 (ODZ1), mRNA
4658	17679		2.05	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4659	17680	30565	0.95	0.0E+00	H92741.1	EST_HUMAN	y92b01.s1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:231721 3'
4659	17680	30566	0.95	0.0E+00	H92741.1	EST_HUMAN	y92b01.s1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:231721 3'
4660	17681	30567	1.42	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4661	17682	30568	5.53	0.0E+00	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4662	17683		1.84	0.0E+00	AB037521.1	NT	Homo sapiens gene for natriuretic protein, partial cds
4664	17685	30569	0.66	0.0E+00	AF195638.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
4669	17690	30576	1.04	0.0E+00	AL162331.1	NT	Novel human gene mapping to chromosome 1
4672	17693	30579	1.89	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4672	17693	30580	1.89	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4673	17694	30581	1.26	0.0E+00	AF167441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
4682	17703	30592	1	0.0E+00	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4682	17703	30593	1	0.0E+00	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4682	17703	30594	1	0.0E+00	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4683	17704	30595	2.03	0.0E+00	AB028970.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4683	17704	30596	2.03	0.0E+00	AB028970.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4688	17709	30602	6.02	0.0E+00	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
4699	17720		2.24	0.0E+00	AF086641.1	NT	Homo sapiens truncated tenascin XB (TNXB) gene, partial cds and TNXA gene recombination breakpoint region
4704	17725	30619	2.92	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
4704	17725	30620	2.92	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
4705	17726	30621	3.31	0.0E+00	M74099.1	NT	Human displacement protein (COAAT) mRNA
4709	17730	30624	2.42	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4709	17730	30625	2.42	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4711	13244	26174	2.02	0.0E+00	T56945.1	EST_HUMAN	yab3g04.r2 Stratagene fetal spleen (#937205) Homo sapiens cDNA clone IMAGE:68310 5'
4711	13244	26175	2.02	0.0E+00	T56945.1	EST_HUMAN	yab3g04.r2 Stratagene fetal spleen (#937205) Homo sapiens cDNA clone IMAGE:68310 5'
4713	17733		1.22	0.0E+00	BE278730.1	EST_HUMAN	90115933F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505521 5'
4737	17757	30651	4.85	0.0E+00	5729817	NT	Homo sapiens ecotropic viral integration site 2B (EVI2B), mRNA
4737	17757	30652	4.85	0.0E+00	5729817	NT	Homo sapiens ecotropic viral integration site 2B (EVI2B), mRNA
4743	17763	30657	5.55	0.0E+00	M80902.1	NT	Human AHNAC nucleoprotein mRNA, 5' end
4746	17766	30660	6.92	0.0E+00	M69197.1	NT	Human haptoglobin and haptoglobin-related protein (HP and HPR) genes, complete cds
4746	17766	30661	6.92	0.0E+00	M69197.1	NT	Human haptoglobin and haptoglobin-related protein (HP and HPR) genes, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4750	17770	30666	2.21	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTFR) gene, complete cds
4752	17772	30688	24.63	0.0E+00	7662479	NT	Homo sapiens KIAA1084 protein (KIAA1084), mRNA
4754	17774	30669	2.9	0.0E+00	7662181	NT	Homo sapiens KIAA0563 gene product (KIAA0563), mRNA
4760	17780	30675	0.96	0.0E+00	S71446.1	NT	SCN1A=brain type I sodium channel alpha-subunit (IIIS5 transmembrane region) [human, placenta, Genomic, 1556 nt]
4760	17780	30676	0.96	0.0E+00	S71446.1	NT	SCN1A=brain type I sodium channel alpha-subunit (IIIS5 transmembrane region) [human, placenta, Genomic, 1556 nt]
4765	17785	30681	0.96	0.0E+00	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4770	17790		1.25	0.0E+00	X59487.1	NT	Human CYP2D7AP pseudogene for cytochrome P450 2D6
4781	17801	30691	0.81	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4781	17801	30692	0.81	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4792	17809	30701	1.56	0.0E+00	AF026801.1	NT	Homo sapiens alpha-3 type IX collagen (COL9A3) gene, promoter region, and exons 1-26
4795	17812	30704	1.12	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4795	17812	30705	1.12	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4797	17814	30707	1.12	0.0E+00	7019320	NT	Homo sapiens proteinx0008 (AD013), mRNA
4797	17814	30708	1.12	0.0E+00	7019320	NT	Homo sapiens proteinx0008 (AD013), mRNA
4825	17842	30740	1.49	0.0E+00	AW444637.1	EST_HUMAN	UI-H-B13-ajw-c-04-Q-UI.s1 NCI CGAP, Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
4831	17848	30749	0.99	0.0E+00	AF030134.1	NT	Homo sapiens aldehyde dehydrogenase 12 (ALDH12) mRNA, complete cds
4832	17849		1.83	0.0E+00	AF083242.1	NT	Homo sapiens HSPC024-iso mRNA, complete cds
4873	17890	30778	0.68	0.0E+00	J00191.1	NT	Human MHC class I transplantation antigen (hla) gene
4873	17890	30779	0.68	0.0E+00	J00191.1	NT	Human MHC class I transplantation antigen (hla) gene
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
4879	17896		4.64	0.0E+00	AF240786.1	NT	genes, complete cds
4882	17899	30788	1.6	0.0E+00	X87205.1	NT	M.fascicularis mRNA for metalloprotease-like, disintegrin-like protein, IVa
4884	17901	30790	0.93	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSR9) mRNA, complete cds
4885	17902	30791	1.29	0.0E+00	AF097416.1	NT	Mus musculus zinc finger transcription factor Kaiso mRNA, complete cds
4886	17903	30792	3.04	0.0E+00	4503766	NT	Homo sapiens fragile X mental retardation 2 (FMR2) mRNA
4888	17905	30794	13.14	0.0E+00	4885048	NT	Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA
4889	17906	30795	1.37	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4891	17908	30797	1.65	0.0E+00	8922180	NT	Homo sapiens hypothetical protein DKFZp762E1312 (DKFZp762E1312), mRNA
4894	17911	30801	4.6	0.0E+00	8923080	NT	Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA
							Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4898	17915	30805	1.75	0.0E+00	M94081.1	NT	J61 segments; and Tcr-C-alpha gene, exons 1-4

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4898	17915	30806	1.75	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4900	17917	30808	1.49	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4900	17917	30809	1.49	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4903	17920	30812	2.38	0.0E+00	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4912	17929	30820	1.18	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, l, 28kD (TAF2l) mRNA
4921	17938	30830	1.59	0.0E+00	X92841.1	NT	H. sapiens MICA gene
4923	17940	30832	1.34	0.0E+00	4585642	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
4924	17941	30833	0.89	0.0E+00	AB037894.1	NT	Homo sapiens mRNA for KIAA1443 protein, partial cds
4925	17942	30834	1.25	0.0E+00	Y09232.1	NT	H. sapiens ferritin alpha pseudogene
4928	17943	30835	1.17	0.0E+00	AB014533.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
4927	17944	30836	2.3	0.0E+00	6677648	NT	Mus musculus zinc finger protein interacting with K protein 1 (Zik1), mRNA
4929	17946	30838	1.49	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DP1) (DSP) mRNA
4930	17947	30839	0.97	0.0E+00	Y16723.1	NT	Homo sapiens gene encoding filensin, exon 8
4931	17948	30840	1.15	0.0E+00	7705546	NT	Homo sapiens zinc-finger DNA-binding protein (HUMHOXY1), mRNA
4932	17949		25.08	0.0E+00	AJ010442.1	NT	Homo sapiens mRNA for Immunoglobulin kappa light chain, anti-RhD, therad 7
4936	17952	30844	25.15	0.0E+00	AF055066.1	NT	Homo sapiens MHC class 1 region
4938	17954		1.97	0.0E+00	4505508	NT	Homo sapiens splice variant AKAP350 mRNA, partial cds
4939	17955	30847	2.01	0.0E+00	AF091711.1	NT	Homo sapiens opiod receptor, delta 1 (OPRD1) mRNA
4941	17957		0.91	0.0E+00	U39965.1	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3) gene, exon 7
4952	17967	30857	0.99	0.0E+00	D63562.1	NT	Homo sapiens COL4A6 gene for a6(V) collagen, exon 44 and partial cds
4954	17969	30859	1.62	0.0E+00	4503684	NT	Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FDPS) mRNA
4961	17976		0.96	0.0E+00	AI291129.1	EST_HUMAN	qm15f05.x1 NCI_CGAP_Lu8 Homo sapiens cDNA clone IMAGE:1881921 3' similar to TR:Q61632 Q61632
4972	17987	30878	0.93	0.0E+00	4504082	NT	EN-2/LACZ FUSION PROTEIN ; Homo sapiens glyican 4 (GPC4) mRNA
4972	17987	30879	0.93	0.0E+00	4504082	NT	Homo sapiens glyican 4 (GPC4) mRNA
4990	18005	30893	1.88	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4995	18010	30897	1.24	0.0E+00	7662319	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
5008	18022		5.04	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
5018	18032	30918	1.06	0.0E+00	M10976.1	NT	Human endogenous retroviral DNA (-4-1), complete retroviral segment
5020	18034		2.79	0.0E+00	BE408863.1	EST_HUMAN	601303729F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638118 5'
5023	18037	30922	3.2	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DP1) (DSP) mRNA

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5030	18044	30926	1.24	0.0E+00	AB028966.1	NT	Homo sapiens mRNA for KIAA1043 protein, partial cds
5044	18057	30935	1.97	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5044	18057	30936	1.97	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5057	18068	30947	0.75	0.0E+00	AA601246.1	EST_HUMAN	no14g09.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR:E239140
5057	18068	30948	0.75	0.0E+00	AA601246.1	EST_HUMAN	no14g09.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR:E239140
5057	18068	30949	0.75	0.0E+00	AA601246.1	EST_HUMAN	no14g09.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR:E239140
5074	18084	30974	1.34	0.0E+00	4758225	NT	Homo sapiens E2F transcription factor 2 (E2F2) mRNA
5088	18098	30974	0.8	0.0E+00	U53588.1	NT	Homo sapiens MHC class 1 region
5094	18104	31009	1.27	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
5097	18107	31009	24.84	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTG3) pseudogene
5122	18132	31029	3.45	0.0E+00	X52988.1	NT	Bacillus amyloqueliciens sacB gene for levansucrase (EC 2.4.1.10)
5141	18150	31029	0.98	0.0E+00	AF240835.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5141	18150	31030	0.98	0.0E+00	AF240835.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5142	18161	31031	0.95	0.0E+00	5454153	NT	Homo sapiens cyclophilin (USA-CYP) mRNA
5171	18180	31067	1.07	0.0E+00	Y12477.1	NT	Homo sapiens putative GPR37 gene, exon 2
5171	18180	31068	1.07	0.0E+00	Y12477.1	NT	Homo sapiens putative GPR37 gene, exon 2
5176	18185	31062	1.31	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5208	18217	31092	0.84	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5208	18217	31093	0.84	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5218	18227	31101	1.13	0.0E+00	U26555.1	NT	Human versican V2 core protein precursor splice-variant mRNA, complete cds
5221	18229	31103	1.01	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINB) mRNA, complete cds
5221	18229	31104	1.01	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINB) mRNA, complete cds
5236	18244	31116	1.11	0.0E+00	4826777	NT	Homo sapiens jumonji (mouse) homolog (JM) mRNA
5257	18265		1.35	0.0E+00	L05367.1	NT	Human oligodendrocyte myelin glycoprotein (OMG) exons 1-2; neurofibromatosis 1 (NF1) exons 28-49; ecotropic viral integration site 2B (EVI2B) exons 1-2; ecotropic viral integration site 2A (EVI2A) exons 1-2; adenylate kinase (AK3) exons 1-2
5264	18272	31161	1.06	0.0E+00	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
5296	18301	31161	0.63	0.0E+00	AB035356.1	NT	Homo sapiens mRNA for neurxin 1-alpha protein, complete cds
5305	18308		2.09	0.0E+00	AL040249.1	EST_HUMAN	DKFZp434i0713_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434i0713 5'
5313	18329		3.2	0.0E+00	AF093093.1	NT	Homo sapiens acornifase (ACO2) gene, nuclear gene encoding mitochondrial protein, exon 15
5324	18430	31181	2.03	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds

Page 515 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5324	18430	31182	2.03	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
5346	18451	31322	1.19	0.0E+00	AI934954.1	EST_HUMAN	wp0808.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2464084 3'
5349	18454	31325	1.2	0.0E+00	9256579	NT	Homo sapiens probocadherin alpha 13 (PCDHA13), mRNA
5364	18469	31340	4.04	0.0E+00	BE931080.1	EST_HUMAN	RC3-GN0076-310800-013-b03 GN0076 Homo sapiens cDNA
5368	18473	31344	2.93	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5368	18473	31345	2.93	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5376	18480	31354	32.34	0.0E+00	X56163.1	NT	H.sapiens immunoglobulin heavy chain gene, variable region
5376	18480	31355	32.34	0.0E+00	X56163.1	NT	H.sapiens immunoglobulin heavy chain gene, variable region
5457	18559	31470	6.37	0.0E+00	BE675498.1	EST_HUMAN	7f10c06.x1 NCL_CGAP_GIL1 Homo sapiens cDNA clone IMAGE:3294250 3'
5458	18560	31471	1.72	0.0E+00	BE220753.1	EST_HUMAN	h89a02.x1 NCL_CGAP_LU24 Homo sapiens cDNA clone IMAGE:3165194 3' similar to SW:Y0564_HUMAN
5459	18561	31472	1.69	0.0E+00	BE794412.1	EST_HUMAN	P42694 HYPOTHETICAL PROTEIN KIAA0054.
5459	18561	31473	1.69	0.0E+00	BE794412.1	EST_HUMAN	601589422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
							601589422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
5460	18562	31474	0.63	0.0E+00	AI189142.1	EST_HUMAN	qd04a04.x1 Soares_placenta_8to9weeks_2NbpHP8c9W Homo sapiens cDNA clone IMAGE:1722702 3' similar to SW:T2D3_DROME P49946 TRANSCRIPTION INITIATION FACTOR TFIIID 85 KD SUBUNIT ;
5464	18566	31477	18.78	0.0E+00	M29908.1	NT	Homo sapiens eosinophil peroxidase (EPP) gene, exon 7
5468	18570	31480	0.56	0.0E+00	AI791363.1	EST_HUMAN	ch68a09.y5 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1472152 5' similar to gb:M18512 IG HEAVY CHAIN PRECURSOR V-I REGION (HUMAN);
5478	18583	31488	4.25	0.0E+00	11421038	NT	Homo sapiens Sp4 transcription factor (SP4), mRNA
5483	18588		1.72	0.0E+00	BF665962.1	EST_HUMAN	602118928F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276254 5'
5489	18589	31499	0.77	0.0E+00	AU134406.1	EST_HUMAN	AU134406 OVARC1 Homo sapiens cDNA clone OVARC1001894 5'
5489	18589	31500	0.77	0.0E+00	AU134406.1	EST_HUMAN	AU134406 OVARC1 Homo sapiens cDNA clone OVARC1001894 5'
5495	18595	31507	0.64	0.0E+00	BE538857.1	EST_HUMAN	601061489F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447839 5'
5504	18604	31533	1.22	0.0E+00	BE292784.1	EST_HUMAN	601108891F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988310 5'
5509	18609	31539	2.05	0.0E+00	BF526328.1	EST_HUMAN	602071372F1 NCL_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214272 5'
5509	18609	31540	2.05	0.0E+00	BF526328.1	EST_HUMAN	602071372F1 NCL_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214272 5'
5529	20048	33350	2.31	0.0E+00	4557364	NT	Homo sapiens Bloom syndrome (BLM) mRNA
5532	18630	31567	1.03	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
5532	18630	31568	1.03	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
5536	18633	31572	4.25	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5536	18633	31573	4.25	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5550	18647	31589	1.18	0.0E+00	D26535.1	NT	Human gene for dihydropyrimidinase succinyltransferase, complete cds (exon 1-15)
5550	18647	31590	1.18	0.0E+00	D26535.1	NT	Human gene for dihydropyrimidinase succinyltransferase, complete cds (exon 1-15)

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5568	18663	31623	1.8	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5572	18668	31629	1.55	0.0E+00	Z38133.1	NT	H.sapiens mRNA for myosin
5591	18687	31655	0.87	0.0E+00	D61564.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-418D05
5591	18687	31656	0.87	0.0E+00	D61564.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-418D05
5594	18690	31660	3.21	0.0E+00	BF529931.1	EST_HUMAN	602042322F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179988 5'
5594	18690	31661	3.21	0.0E+00	BF529931.1	EST_HUMAN	602042322F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4179988 5'
5599	18695	31666	2.24	0.0E+00	BF313139.1	EST_HUMAN	601897658F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126815 5'
5610	18706	31663	3.88	0.0E+00	11434392	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA
5626	18722	31881	0.57	0.0E+00	A1928181.1	EST_HUMAN	w095b02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463051 3' similar to TR:O76054
5626	18722	31882	0.57	0.0E+00	A1928181.1	EST_HUMAN	O75054 KIAA0466 PROTEIN ;
5644	18740	31905	1.24	0.0E+00	BE260777.1	EST_HUMAN	w095b02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463051 3' similar to TR:O75054
5653	18749		7.42	0.0E+00	AW867316.1	EST_HUMAN	O75054 KIAA0466 PROTEIN ;
5668	18763	31932	2.41	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5668	18763	31933	2.41	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5689	18784	31955	1.79	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5689	18784	31956	1.79	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5697	18792	31964	4.3	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5697	18792	31965	4.3	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5704	18799	31976	2.98	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5704	18799	31976	2.98	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5735	18829	32007	0.7	0.0E+00	A198515.1	EST_HUMAN	q194g10.x1 Soares_placenta_8tc9weeks_2NBHP806W Homo sapiens cDNA clone IMAGE:1757730 3' similar to SW:CADC_HUMAN P55289 BRAIN-CADHERIN PRECURSOR ;
5739	18833	32013	7.46	0.0E+00	M85719.1	EST_HUMAN	EST02238 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBM48
5746	18840	32022	5.85	0.0E+00	AW405472.1	EST_HUMAN	UI-HF-BL0-adi-4-02-0-JL1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3061658 5'
5759	18852	32032	1.19	0.0E+00	Z29269.1	NT	H.sapiens isoform 1 gene for L-type calcium channel, exon 14 adhd 15
5771	18863	32042	1.97	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091289-007-h05 CT0263 Homo sapiens cDNA
5771	18863	32043	1.87	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091289-007-h05 CT0263 Homo sapiens cDNA
5771	18863	32044	1.87	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091289-007-h05 CT0263 Homo sapiens cDNA
5774	18868	32047	0.84	0.0E+00	AB035266.1	NT	Homo sapiens mRNA for neurexin II, complete cds
5774	18868	32048	0.84	0.0E+00	AB035266.1	NT	Homo sapiens mRNA for neurexin II, complete cds

Page 517 of 546
Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5776	18868	32051	2.24	0.0E+00	U36261.1	NT	Human beta-prime-adaplin (BAM22) gene, exon 13
5811	18901	32084	1.13	0.0E+00	AB046861.1	NT	Human sapiens mRNA for KIAA1941 protein, partial cds
5833	18923	32107	0.53	0.0E+00	AI114828.1	EST_HUMAN	HA1435 Human fetal liver cDNA library Homo sapiens cDNA
5873	18962	32151	2.4	0.0E+00	AA195905.1	EST_HUMAN	z095b11.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740
5874	18983	32152	1.22	0.0E+00	AJ006345.1	NT	(MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
5874	18983	32153	1.22	0.0E+00	AJ006345.1	NT	Homo sapiens KVLQ11 gene
5883	18972	32165	1.32	0.0E+00	AI207616.1	EST_HUMAN	Homo sapiens KVLQ11 gene
5905	18991	32182	5.12	0.0E+00	11416801	NT	HA2981 Human fetal liver cDNA library Homo sapiens cDNA
5910	18998	32185	1.25	0.0E+00	BE791173.1	EST_HUMAN	Homo sapiens protocadherin beta 2 (PCDH2), mRNA
5920	19006	32198	1.09	0.0E+00	9998943	NT	601584032F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3938551 5'
5921	19007	32198	7.69	0.0E+00	BE560082.1	EST_HUMAN	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
5922	19008	32200	1.33	0.0E+00	10048478	NT	601345141F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3677843 5'
5923	19009	32201	3.06	0.0E+00	U86961.1	NT	Mus musculus acorin (Acz), mRNA
5923	19009	32202	3.06	0.0E+00	U86961.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5942	19028	32222	1.81	0.0E+00	BF339835.1	EST_HUMAN	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5946	19032	32225	0.97	0.0E+00	AF142621.1	NT	602036272F1 NCI_CGAP_Bim64 Homo sapiens cDNA clone IMAGE:4184321 5'
5947	19033	32226	2.82	0.0E+00	BE273983.1	EST_HUMAN	Homo sapiens calcium channel gamma 5 subunit (CACNG5) gene, exon 4 and complete cds
5959	19044	32243	1.14	0.0E+00	BE503096.1	EST_HUMAN	601104462F1 NIH_MGC 14 Homo sapiens cDNA clone IMAGE:3347483 5'
5963	19048	32249	1.79	0.0E+00	BF569905.1	EST_HUMAN	hz83d11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3214581 3' similar to TR:Q62084 Q62084
5968	19053	32253	1.11	0.0E+00	AA454842.1	EST_HUMAN	PHOSPHOLIPASE C NEIGHBORING :
6004	19087	32287	2.27	0.0E+00	AF217289.1	NT	602185852F1 NIH_MGC 45 Homo sapiens cDNA clone IMAGE:4310076 5'
6006	19089	32289	2.43	0.0E+00	BE828144.1	EST_HUMAN	z095d06.s1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:511883 3'
6011	19094	32294	0.91	0.0E+00	BE98636.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6017	19100	32302	0.53	0.0E+00	AJ289880.1	NT	RC5-E10027-210600-022-G10 E10027 Homo sapiens cDNA
6030	19113	32315	0.81	0.0E+00	BE673986.1	EST_HUMAN	601845287F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:3930453 5'
6030	19113	32316	0.81	0.0E+00	BE673986.1	EST_HUMAN	Homo sapiens KIAA0851 gene (partial), X73 gene and LZTFL1 gene
6035	19118	32322	0.8	0.0E+00	AW276760.1	EST_HUMAN	7a72e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3276540 3' similar to SW:DAX1_HUMAN
							P51843 ORPHAN NUCLEAR RECEPTOR DAX-1, [1];
							7a72e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3276540 3' similar to SW:DAX1_HUMAN
							P51843 ORPHAN NUCLEAR RECEPTOR DAX-1, [1];
							xp65f03.x1 NCI_CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2745245 3' similar to TR:P78335 P78335
							GUANYLATE KINASE ASSOCIATED PROTEIN.;

Page 518 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6047	19128	32336	0.67	0.0E+00	BF031742.1	EST_HUMAN	601558060F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827775 5'
6047	19128	32337	0.67	0.0E+00	BF031742.1	EST_HUMAN	601558060F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827775 5'
6059	19140	32352	1.27	0.0E+00	AW470846.1	EST_HUMAN	ha34d08.x1 NCL CGAP_K12 Homo sapiens cDNA clone IMAGE:2875595 3' similar to TR:Q9Z1N3
6072	19153	32364	0.95	0.0E+00	BF155670.1	EST_HUMAN	Q9Z1N3 MYOSIN-RHOGAP PROTEIN, MYR 7. ;
6072	19153	32365	0.95	0.0E+00	BF155670.1	EST_HUMAN	QV44-HT0894-290900-399-a10 HT0894 Homo sapiens cDNA
6080	19160	32371	1.38	0.0E+00	W33069.1	EST_HUMAN	zc08h06.r1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
6080	19160	32372	1.38	0.0E+00	W33069.1	EST_HUMAN	zc08h06.r1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
6081	19161		2.28	0.0E+00	AF012618.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14
6084	19164	32376	2.82	0.0E+00	BE280197.1	EST_HUMAN	601158515F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505323 5'
6091	19170	32385	2.31	0.0E+00	BE889610.1	EST_HUMAN	601512630F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914238 5'
6093	19172	32388	0.53	0.0E+00	BE389673.1	EST_HUMAN	601286320F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3813085 5'
6109	19188	32408	0.63	0.0E+00	AW752848.1	EST_HUMAN	IL3-CT0220-11199-028-E04 CT0220 Homo sapiens cDNA
6112	19190	32410	1.46	0.0E+00	U433071	NT	Homo sapiens KIAA0735 gene product; synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6112	19190	32411	1.46	0.0E+00	U433071	NT	Homo sapiens KIAA0735 gene product; synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6113	19191	32412	1.12	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
6113	19191	32413	1.12	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
6113	19191	32414	1.12	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
6129	25654	32431	9.98	0.0E+00	9789986	NT	Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA
6132	19209	32434	1.43	0.0E+00	AA193506.1	EST_HUMAN	z40h01.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:865905 5' similar to SW:YY05_HUMAN P42694 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5. ;
6132	19209	32435	1.43	0.0E+00	AA193506.1	EST_HUMAN	z40h01.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:865905 5' similar to
6155	19230	32460	11.54	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
6155	19230	32461	11.54	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
6157	19232	32463	0.54	0.0E+00	AW853983.1	EST_HUMAN	RC3-CT0254-110300-027-a09 CT0254 Homo sapiens cDNA
6157	19232	32464	0.54	0.0E+00	AW853983.1	EST_HUMAN	RC3-CT0254-110300-027-a09 CT0254 Homo sapiens cDNA
6197	19271	32506	1.14	0.0E+00	BE258330.1	EST_HUMAN	601114823F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356565 5'
6207	19281	32514	1.24	0.0E+00	BE156561.1	EST_HUMAN	QV0-HT0368-090200-099-a09 HT0368 Homo sapiens cDNA
6217	19291	32524	0.53	0.0E+00	M38107.1	NT	Human neurofibromin type 1 (NF-1) mRNA, 3' end of cds
6254	19327	32558	1.71	0.0E+00	BE379007.1	EST_HUMAN	601239276F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603490 5'
6260	19333	32564	1.19	0.0E+00	AU137772.1	EST_HUMAN	AU137772 PLACE1 Homo sapiens cDNA clone PLACE1007201 5'
6282	19354	32590	3.66	0.0E+00	U45982.1	NT	Human G protein-coupled receptor GPR-9-6 gene, complete cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6311	19382	32822	4.53	0.0E+00	AA204740.1	EST_HUMAN	z981d03.r1 Stralagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:648005 5' similar to
6312	19383	32823	4.05	0.0E+00	11545913	NT	TR:G864195 G864195 LEUKOCYTE SURFACE PROTEIN. ;
6312	19383	32824	4.05	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6331	19401	32642	0.56	0.0E+00	U07223.1	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6349	19418	32659	8.33	0.0E+00	11426367	NT	Human beta2-chimerin mRNA, complete cds
6353	19422	32664	3.66	0.0E+00	BE257173.1	EST_HUMAN	Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8), mRNA
6369	19437		0.97	0.0E+00	AI686048.1	EST_HUMAN	601109632F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350622 5'
6373	19441	32683	1.29	0.0E+00	L35830.1	NT	t91f10.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2248939 3' similar to TR:Q14839 Q14839
6382	19450	32691	1.29	0.0E+00	BE797385.1	EST_HUMAN	Human anion exchanger (AE1) gene, exons 1-20
6382	19450	32692	1.29	0.0E+00	BE797385.1	EST_HUMAN	601567971F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942329 5'
6393	19461	32707	0.65	0.0E+00	AI198025.1	EST_HUMAN	601567971F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942329 5'
6393	19461	32708	0.65	0.0E+00	AI198025.1	EST_HUMAN	q150b11.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:1859901 3' similar to TR:Q12838 Q12838
6398	19464	32710	1	0.0E+00	BF357123.1	EST_HUMAN	q150b11.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:1859901 3' similar to TR:Q12838 Q12838
6404	19472	32720	1.77	0.0E+00	11435630	NT	TFIIIC ALPHA SUBUNIT ;
6414	19482	32729	0.79	0.0E+00	D55649.1	NT	MRO-HT0923-220800-102-b05 HT0923 Homo sapiens cDNA
6432	19498	32751	1	0.0E+00	AW178142.1	EST_HUMAN	Homo sapiens peptide transporter 3 (LOC51296), mRNA
6453	19518	32768	0.74	0.0E+00	BE674544.1	EST_HUMAN	Human mRNA for alpha mannosidase II isozyme, complete cds
6458	19523	32774	0.88	0.0E+00	7662039	NT	IL3-HT0062-010999-014-A04 HT0062 Homo sapiens cDNA
6472	19537		8.48	0.0E+00	AV650020.1	EST_HUMAN	7e02e12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3281302 3' similar to SW:Y176_HUMAN
6481	19546	32795	3.68	0.0E+00	AW575598.1	EST_HUMAN	Q14681 HYPOTHETICAL PROTEIN KIAA0176 ;
6484	19549	32798	5.02	0.0E+00	H01255.1	EST_HUMAN	Homo sapiens KIAA0285 gene product (KIAA0285), mRNA
6493	19558	32809	1.16	0.0E+00	11426293	NT	AV650020 GLC Homo sapiens cDNA clone GLCCAD09 3'
6498	19562	32814	8.09	0.0E+00	X15377.1	NT	UI-HF-BL0-acc-g-12-0-UI.s1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058751 3'
6500	19564	32816	0.72	0.0E+00	AA456375.1	EST_HUMAN	y27b03.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:149933 5'
6501	19565	32817	1.23	0.0E+00	AI612841.1	EST_HUMAN	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
6507	19571	32823	3.93	0.0E+00	BE735989.1	EST_HUMAN	Human gene for the light and heavy chains of myeloperoxidase
6507	19571	32824	3.93	0.0E+00	BE735989.1	EST_HUMAN	aa14e07.r1 Soares, NIHMPu, S1 Homo sapiens cDNA clone IMAGE:313252 5'
6511	19575	32830	0.78	0.0E+00	AW748596.1	EST_HUMAN	tz57d08.x1 NCI_CGAP_OV35 Homo sapiens cDNA clone IMAGE:2292687 3' similar to SW:NTCS_HUMAN
							P53796 SODIUM- AND CHLORIDE-DEPENDENT CREATINE TRANSPORTER 2 ;
							601305368F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639616 5'
							601305368F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639616 5'
							MRO-BT0264-221199-002-f11 BT0264 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6511	19575	32831	0.78	0.0E+00	AW748596.1	EST_HUMAN	MRO-BT0264-221199-002-f11 BT0264 Homo sapiens cDNA
6512	19578		0.67	0.0E+00	U77629.1	NT	Homo sapiens Achaete-Scute homologue 2 (ASCL2) gene, complete cds
6514	19578	32833	28.27	0.0E+00	AU119245.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6514	19578	32834	28.27	0.0E+00	AU119245.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6519	19582	32840	0.86	0.0E+00	BE780453.1	EST_HUMAN	601468712F1 NIH_MGC 67 Homo sapiens cDNA clone IMAGE:3871899 5'
6520	19583	32841	1.02	0.0E+00	X92217.1	NT	H. sapiens germline immunoglobulin heavy chain, variable region, (13-2)
6537	19599	32862	1.64	0.0E+00	AI989483.1	EST_HUMAN	ws25c07.x1 NC1 CGAP_G06 Homo sapiens cDNA clone IMAGE:2498220 3'
6551	19612	32873	1.76	0.0E+00	BE293153.1	EST_HUMAN	601105344F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2987963 5'
6551	19612	32874	1.76	0.0E+00	BE293153.1	EST_HUMAN	601105344F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2987963 5'
6584	19644	32912	0.71	0.0E+00	BE867657.1	EST_HUMAN	601443175F1 NIH_MGC 66 Homo sapiens cDNA clone IMAGE:3847291 5'
6626	19684	32962	1.2	0.0E+00	AW406348.1	EST_HUMAN	UI-HF-BLO-aco-h-02-0-UJ.r1 NIH_MGC 37 Homo sapiens cDNA clone IMAGE:3059931 5'
6626	19684	32963	1.2	0.0E+00	AW406348.1	EST_HUMAN	UI-HF-BLO-aco-h-02-0-UJ.r1 NIH_MGC 37 Homo sapiens cDNA clone IMAGE:3059931 5'
6660	19717	32994	0.89	0.0E+00	AV719444.1	EST_HUMAN	AV719444 GLC Homo sapiens cDNA clone GLOEHC06 5'
6669	19726	33001	1.27	0.0E+00	BE898340.1	EST_HUMAN	601681150F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3951301 5'
6669	19726	33002	1.27	0.0E+00	BE898340.1	EST_HUMAN	601681150F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3951301 5'
6672	19729	33005	2.18	0.0E+00	AF190880.1	NT	Homo sapiens low voltage-activated T-type calcium channel alpha 1G splice variant Cav7.1a (CACNA1G) mRNA, complete cds
6675	19732	33008	0.64	0.0E+00	L48548.1	NT	Homo sapiens tuberin (TSC2) gene, exons 38, 39, 40 and 41
6677	19734	33009	1.11	0.0E+00	11420658	NT	Homo sapiens transformation/transcription domain-associated protein (TTRAP), mRNA
6684	19741	33016	3.24	0.0E+00	AW163640.1	EST_HUMAN	au96h08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206 ;
6684	19741	33017	3.24	0.0E+00	AW163640.1	EST_HUMAN	au96h08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206 ;
6688	19745	33020	0.85	0.0E+00	W37163.1	EST_HUMAN	SW:ZN45_HUMAN Q02386 ZINC FINGER PROTEIN 45 ;
6688	19745	33021	0.85	0.0E+00	W37163.1	EST_HUMAN	zb20e06.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:302626 5' similar to SW:ZN45_HUMAN Q02386 ZINC FINGER PROTEIN 45 ;
6706	19762	33041	1.19	0.0E+00	BE794853.1	EST_HUMAN	601586371F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3943504 5'
6713	19769	33048	4.81	0.0E+00	BE796873.1	EST_HUMAN	601587561F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3941847 5'
6714	19770	33049	3.07	0.0E+00	BE767955.1	EST_HUMAN	QV1-GN0085-140800-318-h02 GN0085 Homo sapiens cDNA
6714	19770	33050	3.07	0.0E+00	BE767955.1	EST_HUMAN	QV1-GN0085-140800-318-h02 GN0085 Homo sapiens cDNA
6718	19774	33053	7.15	0.0E+00	BE89813.1	EST_HUMAN	601512058F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3913311 5'
6718	19774	33054	7.15	0.0E+00	BE89813.1	EST_HUMAN	601512058F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3913311 5'
6727	19783	33062	5.42	0.0E+00	L24493.1	NT	Human antigen CD27 gene, exons 1-2

Page 521 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6732	19788	33066	2	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6732	19788	33067	2	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6738	19794	33074	3.67	0.0E+00	6005983	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
6741	19796	33076	3.87	0.0E+00	AI638412.1	EST_HUMAN	tf31f11 x1 NC1 CGAP_GC6 Homo sapiens cDNA clone IMAGE:2242413 3' similar to SW:WNT3_MOUSE
6743	19798	33078	1.41	0.0E+00	L32832.1	NT	P17553 WNT-3 PROTO-ONCOGENE PROTEIN PRECURSOR. ;
6755	19809	33090	0.79	0.0E+00	AW505430.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
6757	19811	33091	3.98	0.0E+00	AA434584.1	EST_HUMAN	zw52c03.r1 Soares_tctus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773668 5'
6771	19826	33113	1.13	0.0E+00	BF217200.1	EST_HUMAN	601865317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103693 5'
6775	19830	33113	1.68	0.0E+00	BE925875.1	EST_HUMAN	QV3-BN0047-300900-278-c06 BN0047 Homo sapiens cDNA
6808	19862	33149	0.75	0.0E+00	11426758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6808	19862	33150	0.75	0.0E+00	11426758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6826	19880	33171	2.04	0.0E+00	AU125928.1	EST_HUMAN	AU125928 NT2RM4 Homo sapiens cDNA clone NT2RM4002430 5'
6828	19882	33173	0.64	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-260700-001-h10 NN0174 Homo sapiens cDNA
6828	19882	33174	0.64	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-260700-001-h10 NN0174 Homo sapiens cDNA
6851	19904	33199	1.46	0.0E+00	BE142363.1	EST_HUMAN	CM0-HT0143-270999-062-c08 HT0143 Homo sapiens cDNA
6873	19926	33222	1.01	0.0E+00	BE006012.1	EST_HUMAN	RCO-BN0121-280300-032-e04 BN0121 Homo sapiens cDNA
6873	19926	33223	1.01	0.0E+00	BE006012.1	EST_HUMAN	RCO-BN0121-280300-032-e04 BN0121 Homo sapiens cDNA
6901	19953	33250	7.7	0.0E+00	BE169131.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
6903	19955	33252	3.49	0.0E+00	BF095667.1	EST_HUMAN	IL5-GN0032-180900-145-d07 GN0032 Homo sapiens cDNA
6943	20167	33490	3.27	0.0E+00	AA190755.1	EST_HUMAN	zp88603.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:627292 5'
6954	20179	33504	1.04	0.0E+00	U39573.1	NT	Human salivary peroxidase mRNA, complete cds
6958	20183	33506	0.7	0.0E+00	BE671987.1	EST_HUMAN	7e49507 x1 NC1 CGAP_GC8 Homo sapiens cDNA clone IMAGE:3222037 3' similar to TR:Q9Z285 Q9Z285
6970	20193	33520	6.96	0.0E+00	A1940621.1	EST_HUMAN	TEKTN. ;
6970	20193	33521	6.96	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230799-001-B01 ST0024 Homo sapiens cDNA
6984	20207	33537	1.98	0.0E+00	11435626	NT	IL3-ST0024-230799-001-B01 ST0024 Homo sapiens cDNA
6998	20124	33439	1.01	0.0E+00	AL042443.1	EST_HUMAN	Homo sapiens CD6 antigen (CD6), mRNA
6999	20125	33440	47.69	0.0E+00	X56163.1	NT	DKFZp434D2021_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D2021 5'
7002	20128	33443	0.84	0.0E+00	A1168270.1	EST_HUMAN	H.sapiens Immunoglobulin heavy chain gene, variable region
7007	20133	33448	0.92	0.0E+00	BE734087.1	EST_HUMAN	oo10d01.x1 Soares_NSIF_F8_9w_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1565761 3' similar to TR:Q28623 Q28623 TEKTN C1. ;

Page 522 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7030	18362	31249	1.17	0.0E+00	BE566381.1	EST_HUMAN	601339977F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682287 5'
7040	18372	31259	12.91	0.0E+00	BE867889.1	EST_HUMAN	601443667F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847697 5'
7040	18372	31260	12.91	0.0E+00	BE867889.1	EST_HUMAN	601443667F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847697 5'
7048	20070	33376	1.94	0.0E+00	BE550162.1	EST_HUMAN	7b49f03.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
7048	20070	33377	1.94	0.0E+00	BE550162.1	EST_HUMAN	7b49f03.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
7074	20096	33406	2.29	0.0E+00	BF088376.1	EST_HUMAN	Q08379 GOLGIN-95 ;
7081	20102	33413	1.41	0.0E+00	AA195106.1	EST_HUMAN	GM1-HT0877-060900-397-g11 HT0877 Homo sapiens cDNA
7088	20022		11.47	0.0E+00	11034810	NT	zr34g03.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:665332 5'
7090	20024	33326	0.91	0.0E+00	11431474	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
7092	20026	33329	0.76	0.0E+00	BE313075.1	EST_HUMAN	Homo sapiens sodium channel, nonvoltage-gated 1, beta (Liddle syndrome) (SCNN1B), mRNA
7092	20026	33330	0.76	0.0E+00	BE313075.1	EST_HUMAN	601150662F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503391 5'
7106	20040	33342	3.08	0.0E+00	BF568905.1	EST_HUMAN	601150662F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503391 5'
7114	20048	33350	0.61	0.0E+00	4557364	NT	602185832F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
7122	20056		2.02	0.0E+00	J03069.1	NT	Homo sapiens Bloom syndrome (BLM) mRNA
7132	20108	33419	3.33	0.0E+00	AF217289.1	NT	Human MYCL2 gene, complete cds
7132	20108	33420	3.33	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7133	20109	33421	1.77	0.0E+00	M38113.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7146	18378	31266	3.02	0.0E+00	11420775	NT	Human neurofibromatosis type 1 gene, exon x6
7147	18379	31267	0.57	0.0E+00	A1419969.1	EST_HUMAN	Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA
7147	18379	31268	0.57	0.0E+00	A1419969.1	EST_HUMAN	tg53c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2112490 3' similar to SW:OXYB_HUMAN_P22059 OXYSTEROL-BINDING PROTEIN ;
7152	18384	31272	0.66	0.0E+00	BE256708.1	EST_HUMAN	tg53c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2112490 3' similar to SW:OXYB_HUMAN_P22059 OXYSTEROL-BINDING PROTEIN ;
7173	18404	31202	1.21	0.0E+00	AU118478.1	EST_HUMAN	601115515F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356330 5'
7176	18407	31206	5.02	0.0E+00	BE262941.1	EST_HUMAN	AU118478 HEMBA1 Homo sapiens cDNA clone HEMBA1003679 5'
7177	18408	31207	2.25	0.0E+00	Z37978.1	NT	60114894F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3501829 5'
7177	18408	31208	2.25	0.0E+00	Z37976.1	NT	H.sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7178	18409	31209	3.32	0.0E+00	AF257737.1	NT	H.sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7178	18409	31210	3.32	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7185	18416	31217	1.33	0.0E+00	AF310105.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7187	18418	31219	0.59	0.0E+00	BF130916.1	EST_HUMAN	Homo sapiens NALP1 mRNA, complete cds
							601819722F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4051709 5'

Page 523 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7192	20216	33546	0.57	0.0E+00	BE762770.1	EST_HUMAN	QV3-NT0022-140600-223-101 NT0022 Homo sapiens cDNA
7198	20222	33553	2.39	0.0E+00	BF569905.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
7200	20224	33555	0.88	0.0E+00	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7200	20224	33556	0.88	0.0E+00	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7204	20228	33561	4.32	0.0E+00	L01978.1	NT	Human type IV sodium channel alpha polypeptide (SCN4A) gene, exon 19
7209	20232	33565	1.49	0.0E+00	AW502362.1	EST_HUMAN	UI-HF-BR0p-aka-d-10-0-UI.r1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076290 5'
7209	20232	33568	1.49	0.0E+00	AW502362.1	EST_HUMAN	UI-HF-BR0p-aka-d-10-0-UI.r1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076290 5'
7218	20240	33574	0.93	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D2211 5'
7218	20240	33575	0.93	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D2211 5'
7227	20249	33583	5.15	0.0E+00	BF306986.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7233	20254	33588	2.16	0.0E+00	U41302.1	NT	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
7275	20010	33312	1.21	0.0E+00	AL049784.1	NT	Novel human gene mapping to chromosome 13
7315	20286	33627	0.69	0.0E+00	AB026993.1	NT	Homo sapiens mRNA for vascular cadherin-2, complete cds
7315	20286	33628	0.69	0.0E+00	AB026993.1	NT	Homo sapiens mRNA for vascular cadherin-2, complete cds
7320	20291	33634	0.68	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7320	20291	33635	0.68	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7326	20297	33641	1.23	0.0E+00	AW954806.1	EST_HUMAN	EST366876 IMAGE resequences, MAGC Homo sapiens cDNA
7327	20298	33642	1.14	0.0E+00	BE254103.1	EST_HUMAN	601113958F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354568 5'
7340	20311	33654	1.23	0.0E+00	L01973.1	NT	Human type VI sodium channel alpha polypeptide (SCN4A) gene, exon 14
7348	20318	33664	0.68	0.0E+00	AB007695.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7348	20318	33665	0.68	0.0E+00	AB007695.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7354	20324	33672	1.38	0.0E+00	AU133213.1	EST_HUMAN	AU133213 NT2RP4 Homo sapiens cDNA clone NT2RP4001568 5'
7370	20340	33692	1	0.0E+00	11428081	NT	Homo sapiens membrane protein CH1 (CH1), mRNA
7375	20345	33697	2.24	0.0E+00	AU143706.1	EST_HUMAN	AU143706 Y79AA1 Homo sapiens cDNA clone Y79AA1002365 5'
7376	20346	33697	0.96	0.0E+00	4758839	NT	Homo sapiens netrin 1 (NTN1), mRNA
7385	20355	33706	1.34	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7385	20355	33707	1.34	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7407	18430	31181	2.28	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7407	18430	31182	2.28	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7419	20386	33736	0.7	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7419	20386	33737	0.7	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7432	20399	33751	4.41	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7432	20399	33752	4.41	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA

Page 524 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7447	20413	33766	0.65	0.0E+00	AF227744.1	NT	Homo sapiens voltage-dependent calcium channel alpha 1G subunit isoform ae (CACNA1G) mRNA, complete cds
7469	20435	33791	36.24	0.0E+00	AI128344.1	EST_HUMAN	qc67a07.x1 Scores_placenta_8to9weeks_2NbpHP8bp9W Homo sapiens cDNA clone IMAGE:1714644 3' similar to SW:ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR; contains element HGR repetitive element;
7469	20435	33792	36.24	0.0E+00	AI128344.1	EST_HUMAN	qc67a07.x1 Scores_placenta_8to9weeks_2NbpHP8bp9W Homo sapiens cDNA clone IMAGE:1714644 3' similar to SW:ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR; contains element HGR repetitive element;
7472	20438	33795	0.82	0.0E+00	AF227135.1	NT	Homo sapiens candidate taste receptor T2R9 gene, complete cds
7472	20438	33796	0.82	0.0E+00	AF227135.1	NT	Homo sapiens candidate taste receptor T2R9 gene, complete cds
7475	20441	33799	5.42	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7475	20441	33800	5.42	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7478	20444		13.74	0.0E+00	BF337375.1	EST_HUMAN	602035089F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4182839 5'
7480	20446	33802	2.75	0.0E+00	AA128453.1	EST_HUMAN	zn60709.1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:562601 5' similar to TR:G806562 G806562 NEBULIN;
7485	20450	33808	0.75	0.0E+00	AL079497.1	EST_HUMAN	DKFZp434B0226.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B0226 5'
7485	20450	33809	0.75	0.0E+00	AL079497.1	EST_HUMAN	DKFZp434B0226.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B0226 5'
7496	20461	33821	0.57	0.0E+00	AJ270996.1	NT	Homo sapiens partial mRNA for LTRPC5 protein (LTRPC5 gene)
7530	20493	33855	1.12	0.0E+00	BE295499.1	EST_HUMAN	601174576F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529794 5'
7532	20495	33856	0.9	0.0E+00	11427966	NT	Homo sapiens hypothetical protein (FLJ20261), mRNA
7535	20498		1.46	0.0E+00	AU118607.1	EST_HUMAN	AU118607 HEMBA1 Homo sapiens cDNA clone HEMBA1003969 5'
7536	20499	33859	2.02	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7536	20499	33860	2.02	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7547	20510	33868	0.85	0.0E+00	AF245505.1	NT	Homo sapiens adican mRNA, complete cds
7555	20518	33873	7.23	0.0E+00	X70172.1	NT	H.sapiens DNA for ZNGP2 pseudogene, exon 4
7557	20520	33875	6.84	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
7557	20520	33876	6.84	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
7570	20533	33891	0.81	0.0E+00	AW956503.1	EST_HUMAN	EST368873 MAGC resequences, MAGD Homo sapiens cDNA
7572	20535	33893	2.85	0.0E+00	AW950516.1	EST_HUMAN	EST362586 MAGC resequences, MAGA Homo sapiens cDNA
7599	20560	33920	0.79	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7599	20560	33921	0.79	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7599	20560	33922	0.79	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7623	20583		0.62	0.0E+00	M90354.1	NT	Human BTF3 protein homologue gene, complete cds
7624	20584	33947	0.72	0.0E+00	BE408293.1	EST_HUMAN	601302679F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3637434 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7635	20595	33958	0.5	0.0E+00	AW402542.1	EST_HUMAN	U1-HF-BK0-aas-g-07-Q-U1.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054924 5'
7653	20613		1.3	0.0E+00	R87430.1	EST_HUMAN	ym8h10.r1 Soares adult brain N2b-HB55Y Homo sapiens cDNA clone IMAGE:166051 5'
7654	20614	33978	2.42	0.0E+00	AW239326.1	EST_HUMAN	xs39a05.y1 NCL_CGAP_Lu31 Homo sapiens cDNA clone IMAGE:2578640 5' similar to TR:Q08050 Q08050
7676	20634		1.21	0.0E+00	AU117553.1	EST_HUMAN	HNF3/FH TRANSCRIPTION FACTOR GENESIS :
7678	20636	33998	3.92	0.0E+00	11427135	NT	AU117553 HEMBA1 Homo sapiens cDNA clone HEMBA1001661 5'
7697	20655	34019	1.76	0.0E+00	AA211663.1	EST_HUMAN	zn66f02.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb:X03740
7703	20660	34024	0.66	0.0E+00	BF229236.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
7710	20667	34034	0.82	0.0E+00	AW998499.1	EST_HUMAN	MRO-AN0083-270900-004-07 AN0083 Homo sapiens cDNA
7713	20670	34037	0.81	0.0E+00	L32832.1	NT	QV3-BN0046-220300-129-e04 BN0046 Homo sapiens cDNA
7740	20694	34059	1.17	0.0E+00	BF306996.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
7750	20703	34071	1.24	0.0E+00	AU118767.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7782	20735	34107	0.49	0.0E+00	AW499551.1	EST_HUMAN	AU118767 HEMBA1 Homo sapiens cDNA clone HEMBA1004314 5'
7809	20758	34132	0.64	0.0E+00	AB002355.1	NT	U1-HF-BR0p-sj-e-10-Q-U1.r1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3074778 5'
7810	20759	34133	4.06	0.0E+00	AI752561.1	EST_HUMAN	Human mRNA for KIAA0357 gene, partial cds
7810	20759	34133					cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random
7879	20823	34200	0.53	0.0E+00	AA399959.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random
7879	20823	34201	0.53	0.0E+00	AA399959.1	EST_HUMAN	zu68b07.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:743125 5'
7880	20824	34202	0.53	0.0E+00	AL046347.2	EST_HUMAN	zu68b07.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:743125 5'
7897	20840	34221	1.22	0.0E+00	AF084205.1	NT	DKFZp434J087_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434J087 5'
7897	20840	34222	1.22	0.0E+00	AF084205.1	NT	Homo sapiens dynactin 1 (DCNT1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7905	20848	34233	1.06	0.0E+00	U74315.1	EST_HUMAN	Homo sapiens dynactin 1 (DCNT1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7919	20862	34250	0.59	0.0E+00	BE439545.1	EST_HUMAN	HSU74315 Human chromosome 14 Homo sapiens cDNA clone 1-4
7920	20863	34251	1.03	0.0E+00	11417342	NT	HTM1-183F1 HTM1 Homo sapiens cDNA
7939	20881	34271	0.5	0.0E+00	BF569905.1	EST_HUMAN	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
7950	20891	34282	0.73	0.0E+00	AI825504.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
							wb17g05.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2305976 3' similar to TR:O75363 O75363 AIBCT1.;

Page 526 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7950	20891	34283	0.73	0.0E+00	AI825504.1	EST_HUMAN	wb17g05.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2305976 3' similar to TR:075363 075363 ABC1.1
7958	20899	34292	3.09	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
7965	20904	34296	0.96	0.0E+00	N76126.1	EST_HUMAN	zab9e05.s1 Soares_Tetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:289466 3'
7971	20910	34300	5.4	0.0E+00	BF217905.1	EST_HUMAN	601885465F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103729 5'
7976	20915	34306	0.53	0.0E+00	BF569862.1	EST_HUMAN	602185808F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310256 5'
7981	20920	34311	3.8	0.0E+00	AU129622.1	EST_HUMAN	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
8006	25693	34338	0.97	0.0E+00	AW069274.1	EST_HUMAN	cr42e09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42e09 3'
8006	25693	34339	0.97	0.0E+00	AW069274.1	EST_HUMAN	cr42e09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42e09 3'
8010	20948	34341	6.56	0.0E+00	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8017	20955	34348	1.05	0.0E+00	AV758467.1	EST_HUMAN	AV758467 BM Homo sapiens cDNA clone BMFBGG05 5'
8020	20957	34350	5.84	0.0E+00	BE739870.1	EST_HUMAN	601593159F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
8020	20957	34351	5.84	0.0E+00	BE739870.1	EST_HUMAN	601593159F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
8021	20958	34352	0.88	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
8021	20958	34353	0.88	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
8022	20959	34354	3.3	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
8022	20959	34355	3.3	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
8048	20985	34381	2.13	0.0E+00	BF50267.1	EST_HUMAN	rab22c04.x1 Soares NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3263214 3' similar to contains element TAR1 repetitive element;
8060	20997	34393	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884298 5'
8060	20997	34394	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884298 5'
8101	21037	34437	0.54	0.0E+00	AW956307.1	EST_HUMAN	EST1368377 MAGE resequences, MAGD Homo sapiens cDNA
8123	21060	34458	0.52	0.0E+00	Y16795.1	NT	Homo sapiens psliH8A pseudogene
8129	21066	34466	0.49	0.0E+00	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
8130	21067	34467	0.59	0.0E+00	AU117333.1	EST_HUMAN	AU117333 HEMBA1 Homo sapiens cDNA clone HEMBA1001175 5'
8131	21068	34482	0.52	0.0E+00	BE613963.1	EST_HUMAN	601504084F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3905733 5'
8146	21083	34483	4.38	0.0E+00	AW968044.1	EST_HUMAN	EST1380119 MAGE resequences, MAGJ Homo sapiens cDNA
8147	21084	34483	0.75	0.0E+00	AI133435.1	EST_HUMAN	HA2043 Human fetal liver cDNA library Homo sapiens cDNA
8186	21156	34565	0.64	0.0E+00	AU133187.1	EST_HUMAN	AU133187 NT2RP4 Homo sapiens cDNA clone NT2RP4001507 5'
8231	21200	34565	0.55	0.0E+00	BF217200.1	EST_HUMAN	601886317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103693 5'
8244	21213	34620	0.87	0.0E+00	BE313013.1	EST_HUMAN	601150347F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503050 5'
8256	21225	34635	1.09	0.0E+00	AA149791.1	EST_HUMAN	zo01c06.r1 Stragene colon (#837204) Homo sapiens cDNA clone IMAGE:566410 5'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8268	21237	34648	0.88	0.0E+00	BF026628.1	EST_HUMAN	601672310F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955131 5'
8281	21250	34662	0.52	0.0E+00	AA017021.1	EST_HUMAN	ze33h08.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360831 5'
8298	21268	34680	2.26	0.0E+00	BE736046.1	EST_HUMAN	601305558F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639903 5'
8314	21283	34695	2.42	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
8314	21283	34696	2.42	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
8344	21313	34727	0.74	0.0E+00	AW674581.1	EST_HUMAN	bb34d02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2985123 5' similar to TR:O64652 O64652 F17K2.26 PROTEIN.;
8344	21313	34728	0.74	0.0E+00	AW674581.1	EST_HUMAN	bb34d02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2985123 5' similar to TR:O64652 O64652 F17K2.26 PROTEIN.;
8351	21320	34734	2.47	0.0E+00	AA397551.1	EST_HUMAN	281b04.r1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
8353	21322	34735	0.92	0.0E+00	AW387131.1	EST_HUMAN	MFR0-ST0031-061099-003-a11 ST0031 Homo sapiens cDNA
8356	21325	34737	0.62	0.0E+00	AB020691.1	NT	Homo sapiens mRNA for KIAA0884 protein, partial cds
8357	21326	34737	7.99	0.0E+00	AU142402.1	EST_HUMAN	AU142402 Y79AA1 Homo sapiens cDNA clone Y79AA1000277 5'
8361	21330	34741	1.12	0.0E+00	BE388421.1	EST_HUMAN	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
8361	21330	34742	1.12	0.0E+00	BE388421.1	EST_HUMAN	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
8376	21345	34756	0.49	0.0E+00	7657276	NT	Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 1 (KIR2DS1), mRNA
8378	21347	34758	0.92	0.0E+00	W95278.1	EST_HUMAN	ze05d01.r1 Soares fetal heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
8378	21347	34759	0.92	0.0E+00	W95278.1	EST_HUMAN	ze05d01.r1 Soares fetal heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
8380	21349		17.98	0.0E+00	BF673096.1	EST_HUMAN	602153008F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294128 5'
8384	21353		0.95	0.0E+00	AU134114.1	EST_HUMAN	AU134114 OVARC1 Homo sapiens cDNA clone OVARC1001296 5'
8398	21367	34776	1.71	0.0E+00	BF625534.1	EST_HUMAN	602069632F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4212727 5'
8398	21367	34777	1.71	0.0E+00	BF625534.1	EST_HUMAN	602069632F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4212727 5'
8430	21399	34810	1.65	0.0E+00	AL120124.1	EST_HUMAN	DKFZp761P092_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761P092 5'
8430	21399	34811	1.65	0.0E+00	AL120124.1	EST_HUMAN	DKFZp761P092_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761P092 5'
8473	21442		1.24	0.0E+00	BE877693.1	EST_HUMAN	601485254F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887773 5'
8497	21465	34881	1.91	0.0E+00	AW500549.1	EST_HUMAN	UHF-BNO-ak-f-01-Q-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077496 5'
8505	21473	34887	10.07	0.0E+00	AW157233.1	EST_HUMAN	au83b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783799 3' similar to TR:O60463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1];
8523	21491	34906	0.67	0.0E+00	AW072395.1	EST_HUMAN	xa07d12.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2567639 3' similar to contains element ORF repetitive element ;
8541	21509	34926	1.06	0.0E+00	11421722	NT	Homo sapiens centrosomal protein 2 (CEP2), mRNA
8544	21512	34929	0.83	0.0E+00	W01616.1	EST_HUMAN	za36d05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:294633 5'

Page 528 of 546
Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8546	21514	34931	1.26	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8546	21514	34932	1.26	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8559	21527	34946	1.2	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8578	21546	34965	0.44	0.0E+00	D45032.1	NT	Human DNA for ceruloplasmin, exon 5
8599	21567	34983	1.08	0.0E+00	A1367350.1	EST_HUMAN	q95c12.x1 NCL CGAP_U12 Homo sapiens cDNA clone IMAGE:1989334 3' similar to TR:Q14673 Q14673
8610	21578	34994	2.6	0.0E+00	BE674157.1	EST_HUMAN	7d76a04.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278862 3' similar to TR:Q96793 Q96793
8612	21580	34996	1.22	0.0E+00	A1886671.1	EST_HUMAN	wl60b10.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2428275 3' similar to SW:COGT_HUMAN P90281 MATRIX METALLOPROTEINASE-14 PRECURSOR ;
8625	21593	35012	1.29	0.0E+00	BE563650.1	EST_HUMAN	601334780F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8625	21593	35013	1.29	0.0E+00	BE563650.1	EST_HUMAN	601334780F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8633	21601	35023	1.93	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8633	21601	35024	1.93	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8635	21603	35026	1.35	0.0E+00	AA403192.1	EST_HUMAN	z66f02.r1 Soares_tetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to TR:G1304132 G1304132 TPRD ;
8635	21603	35027	1.35	0.0E+00	AA403192.1	EST_HUMAN	z66f02.r1 Soares_tetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to TR:G1304132 G1304132 TPRD ;
8676	21644		3.69	0.0E+00	AA398511.1	EST_HUMAN	z173a08.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727958 3' similar to gb:S85655
8685	21653	35076	0.53	0.0E+00	BE937593.1	EST_HUMAN	PROHIBITIN (HUMAN);
8686	21654	35077	1.25	0.0E+00	AW364874.1	EST_HUMAN	RC2-FN0094-120600-013-h07 FN0094 Homo sapiens cDNA
8686	21654	35078	1.25	0.0E+00	AW364874.1	EST_HUMAN	QV3-DT0045-221298-046-c07 DT0045 Homo sapiens cDNA
8705	21673	35097	1.26	0.0E+00	BE612586.1	EST_HUMAN	QV3-DT0045-221298-046-c07 DT0045 Homo sapiens cDNA
8705	21673	35098	1.26	0.0E+00	BE612586.1	EST_HUMAN	601482412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
8720	21688	35116	1.65	0.0E+00	AL163209.2	NT	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
8720	21688	35116	1.65	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8730	21698	35123	0.7	0.0E+00	A1884477.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
8737	21705	35129	0.85	0.0E+00	AA502294.1	EST_HUMAN	wm33a11.x1 NCL CGAP_U14 Homo sapiens cDNA clone IMAGE:2437724 3' similar to TR:Q75457 Q75457
8742	21710		0.57	0.0E+00	11416799	NT	CYTOSOLIC PHOSPHOLIPASE A2-GAMMA ;
8749	21717	35140	0.99	0.0E+00	A1580780.1	EST_HUMAN	ne25d10.s1 NCL CGAP_C63 Homo sapiens cDNA clone IMAGE:882259 3' similar to TR:G1136434
8752	21720		1.97	0.0E+00	BE980797.1	EST_HUMAN	G1136434 KIAA0187 PROTEIN ;
							G1136434 KIAA0187 PROTEIN ;
							Homo sapiens protocadherin beta 3 (PCDH3), mRNA
							6004f11.x1 Soares_pregnant_uterus_NHPU Homo sapiens cDNA clone IMAGE:2043117 3'
							601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8778	21745	35166	0.55	0.0E+00	AW245765.1	EST_HUMAN	2822701.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8778	21745	35167	0.55	0.0E+00	AW245765.1	EST_HUMAN	2822701.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8779	21746	35168	2.62	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8779	21746	35169	2.62	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8783	21750	35172	0.52	0.0E+00	U88084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8783	21750	35173	0.52	0.0E+00	U88084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8851	21818	35238	1.02	0.0E+00	AJ251760.1	NT	Homo sapiens NESP55, GNAS1 antisense (partial) and Xlaiphas (partial) genes
8856	21823	35244	3	0.0E+00	X98922.1	NT	H sapiens mRNA for gamma-glutamyltransferase
8856	21823	35245	3	0.0E+00	X98922.1	NT	H sapiens mRNA for gamma-glutamyltransferase
8856	21823	35246	3	0.0E+00	X98922.1	NT	H sapiens mRNA for gamma-glutamyltransferase
8871	21838	35280	1.82	0.0E+00	U82879.1	NT	Human immunoglobulin-like transcript-3 mRNA, complete cds
8913	21879	35305	1.16	0.0E+00	AF022855.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8913	21879	35306	1.16	0.0E+00	AF022855.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8916	21882	35308	0.68	0.0E+00	AU131671.1	EST_HUMAN	AU131671 NT2RP3 Homo sapiens cDNA clone NT2RP3003016 5'
8931	21887	35325	0.81	0.0E+00	11426572	NT	Homo sapiens immunoglobulin superfamily, member 2 (IGSF2), mRNA
8935	21901		1.53	0.0E+00	AW513513.1	EST_HUMAN	yo46a01.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2707032 3' similar to gb:M14123_cds4
8937	21903		0.55	0.0E+00	BE783232.1	EST_HUMAN	RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
8938	21904	35328	11.32	0.0E+00	D52650.1	EST_HUMAN	HUM084C02B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-084C02 5'
8969	21935	35381	3.89	0.0E+00	BE378495.1	EST_HUMAN	801236486F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608709 5'
8975	21941	35385	3.98	0.0E+00	AA410545.1	EST_HUMAN	z62a04.r1 Scars ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:724062 5'
8977	21943		3.27	0.0E+00	BF313946.1	EST_HUMAN	601900571F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4129744 5'
8984	21950	35374	1.37	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
8989	21955	35379	1.38	0.0E+00	AW139673.1	EST_HUMAN	U1-H-B1-adf-e-12-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8989	21955	35380	1.38	0.0E+00	AW139673.1	EST_HUMAN	U1-H-B1-adf-e-12-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8994	21960		0.61	0.0E+00	AI640160.1	EST_HUMAN	wa30b10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2299579 3' similar to TR:O15044
9013	21978	35398	3.23	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
9022	21988	35410	0.45	0.0E+00	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
9028	21994	35414	2.33	0.0E+00	BE260272.1	EST_HUMAN	801160051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502836 5'
9033	21999	35418	2.98	0.0E+00	BF700165.1	EST_HUMAN	802127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
9033	21999	35419	2.98	0.0E+00	BF700165.1	EST_HUMAN	802127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'

Page 530 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9033	21999	35420	2.98	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
9047	22013	35436	0.63	0.0E+00	AI458722.1	EST_HUMAN	tk13h11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2150949 3'
9076	22042	35465	0.7	0.0E+00	AL449770.1	EST_HUMAN	AL449770 Homo sapiens fetal brain (Slavides GS) Homo sapiens cDNA
9084	22050	35472	12.96	0.0E+00	AA962527.1	EST_HUMAN	or80g02.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602194 3' similar to gb:M36072 60S
9090	22056	35480	4.79	0.0E+00	10947037	NT	RIBOSOMAL PROTEIN L7A (HUMAN); Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
9090	22056	35481	4.79	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
9114	22080	35508	1.23	0.0E+00	Y11107.3	NT	Homo sapiens ITGB4 gene for Integrin beta 4 subunit, exons 3-41
9116	22082	35510	2.41	0.0E+00	BE278917.1	EST_HUMAN	607156330F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139734 5'
9126	22092		3.32	0.0E+00	AV718377.1	EST_HUMAN	AV718377 FHTB Homo sapiens cDNA clone FHTBAAFI1 5'
9132	22098	35525	3.36	0.0E+00	AW337277.1	EST_HUMAN	xw73c07.x1 NCI_CGAP_Par1 Homo sapiens cDNA clone IMAGE:2833644 3' similar to gb:X63587
9138	22104	35530	1.56	0.0E+00	AU124051	EST_HUMAN	INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
9214	22180	35611	0.88	0.0E+00	AU140704.1	EST_HUMAN	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
9224	22190	35620	0.55	0.0E+00	AB007923.1	NT	AU140704 PLACE4 Homo sapiens cDNA clone PLACE4000089 5'
9229	22195	35624	0.61	0.0E+00	R17132.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
9229	22195	35625	0.61	0.0E+00	R17132.1	EST_HUMAN	yg09e09.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31674 5'
9233	22199	35627	5.11	0.0E+00	AW592233.1	EST_HUMAN	yg09e09.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31674 5'
9233	22199	35628	5.11	0.0E+00	AW592233.1	EST_HUMAN	hf48a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
9269	22235	35664	0.46	0.0E+00	AU128804.1	EST_HUMAN	hf48a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
9281	22247	35676	0.89	0.0E+00	AV714764.1	EST_HUMAN	AU128804 NT2RP2 Homo sapiens cDNA clone NT2RP2004245 5'
9296	22262	35690	3.01	0.0E+00	AL040428.1	EST_HUMAN	AV714764 DCB Homo sapiens cDNA clone DCBAUA06 5'
9296	22262	35691	3.01	0.0E+00	AL040428.1	EST_HUMAN	DKFZp434C1814_s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1814 3'
9302	22287	35697	1.27	0.0E+00	AF133901.1	NT	DKFZp434C1814_s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1814 3'
9304	22289	35700	1.89	0.0E+00	AB040945.1	NT	DKFZp434C1814_s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1814 3'
9310	22275	35707	2.24	0.0E+00	BF675505.1	EST_HUMAN	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
9312	22277		0.92	0.0E+00	BF058289.1	EST_HUMAN	Homo sapiens mRNA for KIAA1512 protein, partial cds
9342	22307	35733	4.84	0.0E+00	11422857	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9352	22317	35743	1.44	0.0E+00	K01241.1	NT	602138483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274708 5'
9361	22326	35754	4.23	0.0E+00	AB020630.1	NT	7k28b03.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3476692 3' similar to TR:O36448 O36448 S GAG;
9361	22326	35755	4.23	0.0E+00	AB020630.1	NT	Homo sapiens tumor protein p73 (TP73), mRNA
9366	22331	35761	1.71	0.0E+00	AV660739.1	EST_HUMAN	Human Ig rearranged H-chain epsilon-3 pseudogene, constant region
							Homo sapiens mRNA for KIAA0823 protein, partial cds
							Homo sapiens mRNA for KIAA0823 protein, partial cds
							Homo sapiens mRNA for KIAA0823 protein, partial cds
							AV660739 GLC Homo sapiens cDNA clone GLCGK12 3'

Page 531 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9372	22337	35767	3.07	0.0E+00	7706838	NT	Homo sapiens polycystin-L (PKDL), mRNA
9377	22342	35772	2.22	0.0E+00	BE793326.1	EST_HUMAN	601586304F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942563 5'
9378	22343	35773	0.46	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
9378	22343	35774	0.46	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
9381	22356		0.98	0.0E+00	H73937.1	EST_HUMAN	yu03h08.r1 Scores fetal liver spleen (NFLS Homo sapiens cDNA clone IMAGE:232767 5'
9401	22368	35798	4.19	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
9401	22368	35798	4.19	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
9411	22376	35814	0.59	0.0E+00	BE612721.1	EST_HUMAN	601452582F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856100 5'
9411	22376	35815	0.59	0.0E+00	BE612721.1	EST_HUMAN	601452582F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856100 5'
9414	22379		0.52	0.0E+00	M89986.1	NT	Human polymorphic loci in Xq28
9418	22381	35819	1.74	0.0E+00	X14766.1	NT	Human mRNA for GABA-A receptor, alpha 1 subunit
9433	22397	35835	0.5	0.0E+00	AU127096.1	EST_HUMAN	AU127096 NT2RP2 Homo sapiens cDNA clone NT2RP2000579 5'
9437	22401	35839	1.29	0.0E+00	AI061395.1	EST_HUMAN	an29e04.x1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1700094 3'
9442	22406	35843	1.96	0.0E+00	AI954607.1	EST_HUMAN	wq34h12.x1 NCL CGAP_G06 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW:MGB3_HUMAN
9447	22411	35848	4.1	0.0E+00	9256595	NT	O15480 MELANOMA-ASSOCIATED ANTIGEN B3 ;
9458	22422	35860	1.18	0.0E+00	AW958311.1	EST_HUMAN	Homo sapiens protocadherin alpha 8 (P0DHAB), mRNA
9468	22432	35870	4.72	0.0E+00	9635487	NT	Homo sapiens MAP-kinase activating death domain (MADD), mRNA
9484	22448	35888	1.44	0.0E+00	AU142662.1	EST_HUMAN	Human endogenous retrovirus, complete genome
9499	22463	35904	1.46	0.0E+00	11436995	NT	AU142662 Y79AA1 Homo sapiens cDNA clone Y79AA1000678 5'
9500	22464		0.8	0.0E+00	BE410768.1	EST_HUMAN	Homo sapiens MAP-kinase activating death domain (MADD), mRNA
9513	22476	35921	1.29	0.0E+00	BF002024.1	EST_HUMAN	601301676F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3314471 3' similar to TR:Q9UH62
9527	22490	35937	1.25	0.0E+00	AB011150.1	NT	7q97h12.x1 NCL CGAP_G018 Homo sapiens cDNA clone IMAGE:3636163 5'
9528	22491	35938	4.85	0.0E+00	BE794823.1	EST_HUMAN	Q9UH62 HYPOTHETICAL 42.5 KD PROTEIN ;
9534	22497	35945	1.04	0.0E+00	AU196229.1	EST_HUMAN	Homo sapiens mRNA for KIAA0578 protein, partial cds
9539	22502	35950	1.36	0.0E+00	BE883843.1	EST_HUMAN	6015689294F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943463 5'
9539	22502	35951	1.36	0.0E+00	BE883843.1	EST_HUMAN	AU136229 PLACE1 Homo sapiens cDNA clone PLACE1003804 5'
9557	22519	35967	0.77	0.0E+00	AB011166.1	NT	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911986 5'
9561	22523	35971	3.53	0.0E+00	AA344601.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911986 5'
9561	22523	35972	3.53	0.0E+00	AA344601.1	EST_HUMAN	Homo sapiens mRNA for KIAA0594 protein, partial cds
9619	22563	36011	1.02	0.0E+00	AW873469.1	EST_HUMAN	Homo sapiens Gall bladder 1 Homo sapiens cDNA 5' end
							EST50505 Gall bladder 1 Homo sapiens cDNA 5' end
							ba54d08.v3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900387 5' similar to TR:O60275 O60275
							KIAA0522 PROTEIN ;

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9619	22563	36012	1.02	0.0E+00	AW673469.1	EST_HUMAN	ba64d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2803367 5' similar to TR:O60275 O60275 KIA0522 PROTEIN ;
9653	22596	36044	4.71	0.0E+00	BE207063.1	EST_HUMAN	ba09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9653	22596	36045	4.71	0.0E+00	BE207063.1	EST_HUMAN	ba09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9654	22821	36275	1.77	0.0E+00	BF348013.1	EST_HUMAN	602023150F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4158300 5'
9700	22653	36107	2.9	0.0E+00	BE712515.1	EST_HUMAN	QV2-HT0698-250700-282-b08 HT0698 Homo sapiens cDNA
9732	22760	36213	0.86	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859035 5'
9732	22760	36214	0.86	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859035 5'
9738	22766	36221	0.53	0.0E+00	AI806351.1	EST_HUMAN	RC-BT108-040399-032 BT108 Homo sapiens cDNA
9741	22769	36223	3.69	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9741	22769	36224	3.69	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9751	22692	36149	2.54	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120.t1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434L0120 5'
9786	22727	36183	2.35	0.0E+00	AI088043.1	EST_HUMAN	ow60h01.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1651249 3' similar to TR:Q14677 Q14677 KIAA0171 PROTEIN ;
9793	21116	34515	0.85	0.0E+00	BF309962.1	EST_HUMAN	601892245F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138066 5'
9796	21118	34518	2.64	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9795	21118	34519	2.64	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9797	21120	34522	20.82	0.0E+00	AI290909.1	EST_HUMAN	qm09a06.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A ;
9797	21120	34523	20.82	0.0E+00	AI290909.1	EST_HUMAN	qm09a06.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A ;
9798	21121	34524	3.57	0.0E+00	AW953836.1	EST_HUMAN	EST366026 MAGC resequences, MAGC Homo sapiens cDNA
9825	22874	36129	3.43	0.0E+00	AF153468.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8
9828	22677	36133	0.66	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9828	22677	36134	0.66	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9837	22773		22.2	0.0E+00	BE255829.1	EST_HUMAN	601109942F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
9840	22776	36231	1.35	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9840	22776	36232	1.35	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9843	22779	36234	30.94	0.0E+00	AW163779.1	EST_HUMAN	au86c04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783142 5' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);

Page 533 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9854	22790	36242	0.44	0.0E+00	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9867	22803	36257	3.12	0.0E+00	BE263191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160477 5'
9885	22838	36293	4.11	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9885	22838	36294	4.11	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9887	22840	36297	2.92	0.0E+00	BE746215.1	EST_HUMAN	601578683F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3927648 5'
9897	22850	36307	1.81	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9897	22850	36308	1.81	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9897	22850	36309	1.81	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9917	22738	36181	1.48	0.0E+00	BE900549.1	EST_HUMAN	601673425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956238 5'
9935	22862	36323	0.91	0.0E+00	AV701829.1	EST_HUMAN	AV701829 ADB Homo sapiens cDNA clone ADBBYH01 5'
9947	22874	36335	2.59	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9947	22874	36336	2.59	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9980	22907	36372	1.86	0.0E+00	BE082977.1	EST_HUMAN	RC2-BT0642-130300-017-g01 BT0642 Homo sapiens cDNA
9999	22926	36392	2.65	0.0E+00	AW500293.1	EST_HUMAN	UI-HF-BNO-akg-b-12-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9999	22926	36393	2.65	0.0E+00	AW500293.1	EST_HUMAN	UI-HF-BNO-akg-b-12-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
10008	22935	36399	1.45	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10008	22935	36400	1.45	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10010	22937	36401	0.76	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3874037 5'
10010	22937	36402	0.76	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3874037 5'
10019	22946	36413	0.52	0.0E+00	W56629.1	EST_HUMAN	zaf16e11.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:340844 5'
10019	22946	36414	0.52	0.0E+00	W56629.1	EST_HUMAN	zaf16e11.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:340844 5'
10032	22959	36427	1.05	0.0E+00	AB035356.1	NT	Homo sapiens mRNA for neurixin I-alpha protein, complete cds
10036	22963		0.56	0.0E+00	AI124780.1	EST_HUMAN	am56e11.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539548 3'
10038	22965	36432	2.73	0.0E+00	AW500526.1	EST_HUMAN	UI-HF-BNO-akg-c-07-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077364 5'
10082	23009	36481	1.51	0.0E+00	AF009568.1	NT	Multiple sclerosis associated retrovirus polyprotein (p6) mRNA, partial cds
10109	23035	36512	2.37	0.0E+00	S78466.1	NT	AlGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
10109	23035	36513	2.37	0.0E+00	S78466.1	NT	AlGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
10112	23038	36518	3.13	0.0E+00	BE563320.1	EST_HUMAN	601334603F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688680 5'
10132	23058	36535	1.42	0.0E+00	AW363135.1	EST_HUMAN	CM2-CT0311-301199-043-h11 CT0311 Homo sapiens cDNA
10162	23077	36553	0.61	0.0E+00	11436432	NT	Homo sapiens multimetric (MMRN), mRNA

Page 534 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10153	23078	36554	1.71	0.0E+00	11424987	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
10162	23087	36564	0.82	0.0E+00	BE206710.1	EST_HUMAN	b526c01.x1 NIH_MGC_5 Homo sapiens cDNA clone IMAGE:2964000 3'
10178	23103	36583	2.6	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
10178	23103	36584	2.6	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
10187	23112	36596	1.82	0.0E+00	AW500936.1	EST_HUMAN	U1-HF-BPOp-af-f05-0-J11 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072897 5'
10193	23118	36603	16.11	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
10194	23119	36604	16.11	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
10194	23119	36605	0.46	0.0E+00	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
10206	23131	36618	0.46	0.0E+00	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
10224	23149	36638	1.76	0.0E+00	7662067	EST	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
10229	23154	36644	3.6	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
10239	23164	36651	0.71	0.0E+00	AL041084.2	EST_HUMAN	DKFZp434B2416_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B2416 5'
10240	23165	36652	2.57	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
10268	23193	36680	2.44	0.0E+00	AF152308.1	NT	Homo sapiens probocadherin alpha 12 (PCDH-alpha12) mRNA, complete cds
10268	23193	36681	5.52	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
10284	23209	36694	5.52	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
10314	23238	36720	2.5	0.0E+00	BF092898.1	EST_HUMAN	MR4-TN0114-110900-101-e04 TN0114 Homo sapiens cDNA
10323	23247	36726	2.73	0.0E+00	BE280793.1	EST_HUMAN	601155227F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138788 5'
10323	23247	36727	1.2	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
10332	23256	36733	1.2	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
10333	23257	36734	3.64	0.0E+00	AW236289.1	EST_HUMAN	xn72b01.x1 NCL CGAP_CML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gb:X02152_cds1 L-
10342	23266	36745	0.75	0.0E+00	AA341305.1	EST_HUMAN	LACTATE DEHYDROGENASE M CHAIN (HUMAN); EST46740 Fetal kidney II Homo sapiens cDNA 5' end
10363	23286	36763	0.83	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
10376	23299	36774	0.75	0.0E+00	AW964113.1	EST_HUMAN	EST376186 MAGE resequences, MAGH Homo sapiens cDNA
10376	23299	36775	7.08	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
10378	23302	36778	7.08	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
10382	23304	36781	13.11	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
10416	23338	36825	2.8	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
10416	23338	36825	2.8	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
10432	23354	36839	3.43	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
			3.43	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
			2.24	0.0E+00	AJ265844.1	NT	Homo sapiens partial RANBP7 gene for RanBP7/importin7 and partial ZNF143 gene

Page 535 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10432	23354	36840	2.24	0.0E+00	AJ25844.1	NT	Homo sapiens partial RANBP7 gene for RANBP7/importin7 and partial ZNF143 gene
10437	23359	36847	0.75	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKC Homo sapiens cDNA clone GKCDXA07 5'
10437	23359	36848	0.75	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKC Homo sapiens cDNA clone GKCDXA07 5'
10443	23365	36855	0.76	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
10445	23367	36858	2.64	0.0E+00	AA196387.1	EST_HUMAN	zfp97h11.1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628197 5'
10470	23392	36887	1.78	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1 Scarses_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545 5'
10470	23392	36888	1.78	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1 Scarses_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545 5'
10517	23439	36937	1.79	0.0E+00	AF179308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
10561	23483	36978	0.88	0.0E+00	BE880658.1	EST_HUMAN	601491565F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3893667 5'
10573	23495	36987	11.49	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
10573	23495	36988	11.49	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
10578	23500	36992	0.62	0.0E+00	AU127403.1	EST_HUMAN	AU127403 NT2RP2 Homo sapiens cDNA clone NT2RP2001212 5'
10588	23510	37003	0.86	0.0E+00	BE958511.1	EST_HUMAN	601645134F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3930177 5'
10588	23510	37004	0.86	0.0E+00	BE958511.1	EST_HUMAN	601645134F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3930177 5'
10605	23527	37023	0.98	0.0E+00	BE897487.1	EST_HUMAN	601432317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917453 5'
10616	23558	37037	0.68	0.0E+00	AA311624.1	EST_HUMAN	EST182353 Jurkat T-cells V1 Homo sapiens cDNA 5' end
10617	23539	37038	0.56	0.0E+00	4758827	NT	Homo sapiens neuritin III (NRXN3) mRNA
10629	23551	37051	0.78	0.0E+00	BE891113.1	EST_HUMAN	601432228F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917598 5'
10632	23554	37054	1.19	0.0E+00	11580151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10642	23564	37060	1.39	0.0E+00	AB029290.1	NT	Homo sapiens mRNA for actin binding protein ABP620, complete cds
10643	23565	37061	0.8	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987918 5'
10643	23565	37062	0.8	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987918 5'
10650	23572	37067	4.13	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10650	23572	37068	4.13	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10658	23580	37077	1.27	0.0E+00	AA704457.1	EST_HUMAN	z19b06.s1 Scarses_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:450707 3' similar to
10660	23592	37078	1.19	0.0E+00	M22921.1	NT	gb:M141423_cds1 RETROVIRUS-RELATED GAG POLYPROTEIN (HUMAN); Human beta 1.4-galactosyl-transferase mRNA, complete cds
10662	23584	37081	4.52	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184939 5'
10662	23584	37082	4.52	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184939 5'
10687	23609	37103	5.24	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924578 5'
10687	23609	37104	5.24	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924578 5'
10719	23641	37134	0.48	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DCB Homo sapiens cDNA clone DCBBDC09 5'
10719	23641	37135	0.48	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DCB Homo sapiens cDNA clone DCBBDC09 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10750	23672	37167	1.13	0.0E+00	AI631818.1	EST_HUMAN	wa36e03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204
10750	23672	37168	1.13	0.0E+00	AI631818.1	EST_HUMAN	Q61204 NOTCH2-LIKE;
10760	23685	37181	2	0.0E+00	T03078.1	EST_HUMAN	wa36e03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204
10769	23710	37212	0.67	0.0E+00	AU122429.1	EST_HUMAN	Q61204 NOTCH2-LIKE;
10795	23716	37218	0.43	0.0E+00	6005921	NT	FB23A4 Fetal brain, Striatogene Homo sapiens cDNA clone FB23A4 3'end
10817	23738	37241	2.63	0.0E+00	BF436218.1	EST_HUMAN	AU122429 MAMMA1 Homo sapiens cDNA clone MAMMA1002368 5'
10818	23739		1.3	0.0E+00	AV654785.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
10837	23757	37257	5.03	0.0E+00	AW517960.1	EST_HUMAN	AV654785 GLC Homo sapiens cDNA clone GLCZC07 3'
10841	23761	37261	18.38	0.0E+00	BE549213.1	EST_HUMAN	ku74b01.x1 NCL_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:M69068 MOESIN (HUMAN);
10858	23778	37278	0.64	0.0E+00	11436005	NT	601078764F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464703 5'
10883	23803	37307	0.44	0.0E+00	X69893.1	NT	Homo sapiens hypophyseal protein DKFZp761P1010 (DKFZp761P1010), mRNA
10884	23804	37308	4.15	0.0E+00	BE781742.1	EST_HUMAN	H. sapiens mRNA for NK receptor (183 Act)
10903	23823	37334	3.07	0.0E+00	BE082720.1	EST_HUMAN	601467419F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
10903	23823	37335	3.07	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0642-150200-012-403 BT0642 Homo sapiens cDNA
10910	23830	37343	0.56	0.0E+00	Y08032.1	NT	RC2-BT0642-150200-012-403 BT0642 Homo sapiens cDNA
10915	23835	37351	0.7	0.0E+00	AI656890.1	EST_HUMAN	Human endogenous retrovirus-K, LTR U5 and gag gene
10922	23842	37358	1.6	0.0E+00	BE743215.1	EST_HUMAN	tt54e07.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2244612 3'
10925	23845	37360	0.97	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
10925	23845	37361	0.97	0.0E+00	BE617655.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
10925	23845	37360	0.97	0.0E+00	BE617655.1	EST_HUMAN	601441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845956 3'
10946	23866	37380	0.55	0.0E+00	H39805.1	EST_HUMAN	601441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845956 3'
10960	23880	37393	0.48	0.0E+00	AW748117.1	EST_HUMAN	yp01a10.r1 Soares breast 3NbrHst Homo sapiens cDNA clone IMAGE:186138 5'
10972	23892	37408	1.16	0.0E+00	D87675.1	NT	QV0-BT0107-230799-007-c06 BT0107 Homo sapiens cDNA
10973	23893	37407	0.48	0.0E+00	AF081384.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10994	23914	37430	0.46	0.0E+00	AW342141.1	EST_HUMAN	Synthetic construct CD30 ligand-exon A fusion protein (CD30L-ETA fusion) mRNA, partial cds
10994	23914	37431	0.46	0.0E+00	AW342141.1	EST_HUMAN	EST 00007 Human differential display products Homo sapiens cDNA clone UNCCD7
10999	23965	37489	1.72	0.0E+00	AV711075.1	EST_HUMAN	EST 00007 Human differential display products Homo sapiens cDNA clone UNCCD7
10999	23965	37490	1.72	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CUAAG05 5'
11001	23967		3.29	0.0E+00	AW813783.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CUAAG05 5'
11007	23972	37496	6.07	0.0E+00	AW963663.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
11019	23984	37510	1.81	0.0E+00	11431124	NT	EST375636 IMAGE: resequences, MAGH Homo sapiens cDNA
							Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA

Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11019	23984	37511	1.81	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11023	23988	37515	1.76	0.0E+00	AW057621.1	EST_HUMAN	wy61f09.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2553065 3' similar to TR:Q60566 Q60566 VDX;
11029	23993	37520	1.96	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D0917 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0917
11030	23994	37521	2.54	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
11030	23994	37522	2.54	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
11034	23998	37525	2.13	0.0E+00	BF306642.1	EST_HUMAN	601888704F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122649 5'
11041	24005	37531	3.83	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
11041	24005	37532	3.83	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
11055	24016	37541	5.31	0.0E+00	AW404795.1	EST_HUMAN	U1-HF-BL0-aam-4-04-0-J1.1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059383 5'
11058	24021	37544	2.69	0.0E+00	11424828	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
11059	24022	37545	7.34	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
11059	24022	37546	7.34	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
11060	24023	37547	2.71	0.0E+00	AI991827.1	EST_HUMAN	wu62b06.x1 Soares_Dickgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2621715 3'
11063	24026	37551	1.64	0.0E+00	BE882109.1	EST_HUMAN	601505204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3906865 5'
11066	24028	37553	21.37	0.0E+00	BE891630.1	EST_HUMAN	601434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919636 5'
11068	24031	37554	4.59	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
11068	24031	37555	4.59	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
11083	18962	32151	5.57	0.0E+00	AA189905.1	EST_HUMAN	zp95b11.r1 Stratiene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
11103	24083	37586	100.2	0.0E+00	AA809080.1	EST_HUMAN	nw17c08.s1 NCL CGAP_GC80 Homo sapiens cDNA clone IMAGE:1240718 3' similar to gb:X67809 IG LAMBDA CHAIN C REGIONS (HUMAN);
11104	24084	37587	4.22	0.0E+00	BE793498.1	EST_HUMAN	60158828F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943015 5'
11113	24073	37595	15.77	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
11113	24073	37596	15.77	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
11126	24086	37613	14.2	0.0E+00	AA464313.1	EST_HUMAN	zx78c12.r1 Soares ovary tumor NBH07 Homo sapiens cDNA clone HTCAQH06 5'
11129	24089	37618	24.26	0.0E+00	AW516055.1	EST_HUMAN	IG KAPPA CHAIN PRECURSOR V-J REGION (HUMAN);
11134	24094	37623	1.88	0.0E+00	AU135741.1	EST_HUMAN	xy04g10.x1 NCL CGAP_Lym12 Homo sapiens cDNA clone IMAGE:809878 5' similar to gb:X72467 RIBOSOMAL PROTEIN S16 (HUMAN);
							AU135741 PLACE1 Homo sapiens cDNA clone PLACE1002794 5'

Page 538 of 546
Table 4
Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11139	24099	37626	3.36	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
11139	24099	37627	3.36	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
11139	24099	37628	3.36	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
11141	24101	37629	1.68	0.0E+00	Z34897.1	NT	H. sapiens mRNA for H1 histamine receptor
11142	24102	37630	2.54	0.0E+00	F13069.1	EST_HUMAN	HSC3C031 normalized infant brain cDNA Homo sapiens cDNA clone c-3ic03
11159	24117	37643	2.4	0.0E+00	M27751.1	NT	Homo sapiens immunoglobulin kappa-chain A14 V-region precursor (IGKV) gene, partial cds
11159	24117	37644	2.4	0.0E+00	M27751.1	NT	Homo sapiens immunoglobulin kappa-chain A14 V-region precursor (IGKV) gene, partial cds
11167	24125	37654	40.1	0.0E+00	AW338094.1	EST_HUMAN	xv66f01.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2832985 3' similar to gb:X17115 IG MU CHAIN C REGION (HUMAN);
11168	24126	37655	3.54	0.0E+00	AW451230.1	EST_HUMAN	U1H-B13-ah-e-01-0-U1.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
11168	24126	37656	3.54	0.0E+00	AW451230.1	EST_HUMAN	U1H-B13-ah-e-01-0-U1.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
11170	13316		8.04	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
11184	24140	37674	2.07	0.0E+00	BE298449.1	EST_HUMAN	601119248F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029219 5'
11196	24151	37682	2.13	0.0E+00	AB011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
11199	24154	37686	1.69	0.0E+00	Z20655.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
11206	24160	37690	1.68	0.0E+00	BE264995.1	EST_HUMAN	601193824F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538012 5'
11214	24187	37696	1.62	0.0E+00	BE792155.1	EST_HUMAN	601582046F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936539 5'
11215	24168		70.33	0.0E+00	BF684061.1	EST_HUMAN	602141405F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302432 5'
11217	24170	37698	7.66	0.0E+00	AU118386.1	EST_HUMAN	AU118386 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
11218	24171					EST_HUMAN	xn72b01.x1 NCL_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2689977 3' similar to gb:X02152_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
11223	24176	37702	4.92	0.0E+00	AI149809.1	EST_HUMAN	qf43c03.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
11223	24176	37703	4.92	0.0E+00	AI149809.1	EST_HUMAN	qf43c03.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
11224	24177	37704	2.09	0.0E+00	AW391937.1	EST_HUMAN	QV4-ST0234-121199-032-506 ST0234 Homo sapiens cDNA
11234	24187		1.54	0.0E+00	AU116908.1	EST_HUMAN	AU116908 HEMBA1 Homo sapiens cDNA clone HEMBA1000255 5'
11238	24191	37710	9.23	0.0E+00	11424726	NT	Homo sapiens insulin receptor (INSR), mRNA
11244	24197	37716	145.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0093-170400-191-d08 UM0093 Homo sapiens cDNA
11244	24197	37717	145.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0093-170400-191-d08 UM0093 Homo sapiens cDNA
11245	24198	37718	3.26	0.0E+00	BF340308.1	EST_HUMAN	602037014F1 NCL_CGAP_Bme4 Homo sapiens cDNA clone IMAGE:4184979 5'
11247	24200	37721	49.67	0.0E+00	BE261209.1	EST_HUMAN	601148357F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
11251	24204	37726	1.74	0.0E+00	AB029040.1	NT	Homo sapiens mRNA for KIAA1117 protein, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11256	24208	37731	6.12	0.0E+00	U50326.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
11257	24209	37732	1.72	0.0E+00	Z20856.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
11260	24212	37735	6	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-07 FT0134 Homo sapiens cDNA
11260	24212	37736	6	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-07 FT0134 Homo sapiens cDNA
11283	24233	37759	89.91	0.0E+00	AA740782.1	EST_HUMAN	ab32e07.s1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325412 3' similar to contains element MSK1 repetitive element;
11285	24235	37762	38.54	0.0E+00	AW46922.1	EST_HUMAN	ha04h04.x1 NCL_CGAP_Kid2 Homo sapiens cDNA clone IMAGE:2872759 3'
11291	24241	37768	2.85	0.0E+00	AF252303.1	NT	Homo sapiens signaling lymphocytic activation molecule (SLAM) gene, exon 2
11304	24254	37780	1.84	0.0E+00	BE286478.1	EST_HUMAN	601192748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536867 5'
11304	24254	37781	1.84	0.0E+00	BE286478.1	EST_HUMAN	601192748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536867 5'
11307	24257	37783	7.6	0.0E+00	C05089.1	EST_HUMAN	C05089 Human heart cDNA (YNekamura) Homo sapiens cDNA clone 3NHC4817
11313	24263	37789	1.91	0.0E+00	AA746375.1	EST_HUMAN	ae5gh01.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
11313	24263	37790	1.91	0.0E+00	AA746375.1	EST_HUMAN	ae5gh01.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
11321	24271	37798	1.66	0.0E+00	BF353825.1	EST_HUMAN	QV2-HT0698-020900-285-d07 HT0698 Homo sapiens cDNA
11322	24272	37799	5.79	0.0E+00	AL157608.1	EST_HUMAN	DKFZ761J2116 r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZ761J2116 5'
11333	24283	37807	6.83	0.0E+00	AU116988.1	EST_HUMAN	AU116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
11347	24297	37825	1.54	0.0E+00	AU1132437.1	EST_HUMAN	AU132437 NT2RP3 Homo sapiens cDNA clone NT2RP3004422 5'
11367	18866	32047	2.84	0.0E+00	AB035286.1	NT	Homo sapiens mRNA for neurax II, complete cds
11367	18866	32048	2.84	0.0E+00	AB035286.1	NT	Homo sapiens mRNA for neurax II, complete cds
11371	24318	37846	2.4	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
11371	24318	37847	2.4	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
11372	24319	37851	1.48	0.0E+00	AV701152.1	EST_HUMAN	AV701152 ADA Homo sapiens cDNA clone ADAAAAD06 5'
11387	24334	37863	75.44	0.0E+00	AW406380.1	EST_HUMAN	UHF-BL0-acc-c09-0-UJ.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3060089 5'
11390	24336	37865	2.81	0.0E+00	BE896423.1	EST_HUMAN	601439092F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924142 5'
11397	24342	37874	2.26	0.0E+00	AW500307.1	EST_HUMAN	UHF-BN0-akg-d-02-0-UJ.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
11397	24342	37875	2.26	0.0E+00	AW500307.1	EST_HUMAN	UHF-BN0-akg-d-02-0-UJ.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
							bb78c04.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048486 5' similar to gb:Y00345_cde1
							POLYADENYLATE-BINDING PROTEIN (HUMAN); gb:X65553 M.musculus mRNA for poly(A) binding protein (MOUSE);
11398	24343	37876	7.11	0.0E+00	BE018293.1	EST_HUMAN	H.sapiens gene for Ig kappa light chain variable region "011"
11417	24361	37896	14.52	0.0E+00	X59314.1	NT	
11421	24365	37900	2.3	0.0E+00	AU121677.1	EST_HUMAN	AU121677 MAMMA1 Homo sapiens cDNA clone MAMMA1000731 5'
11430	24374	37913	4.14	0.0E+00	BE897953.1	EST_HUMAN	601440-446F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925403 5'
11431	24375	37914	1.58	0.0E+00	AI459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
11431	24375	37915	1.58	0.0E+00	AI459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'

Page 540 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11441	24384	37924	4.83	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
11446	24389	37931	4.18	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215. Homo sapiens cDNA clone 77E12
11446	24389	37932	4.18	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #836215. Homo sapiens cDNA clone 77E12
11474	24417	37967	2.85	0.0E+00	4758827	NT	Homo sapiens neurexin III (NRXN3) mRNA
11475	24418	37968	3.38	0.0E+00	BF206591.1	EST_HUMAN	601870902F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4101433 5'
11478	24421	37970	12.88	0.0E+00	AW207734.1	EST_HUMAN	U1-H-B12-age-h-01-0-U1.st NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
11479	24422	37971	5.09	0.0E+00	AW604975.1	EST_HUMAN	RC0-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
11479	24422	37972	5.09	0.0E+00	AW604975.1	EST_HUMAN	RC0-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
11483	24426	37975	2.91	0.0E+00	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11483	24426	37976	2.91	0.0E+00	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11484	24427	37977	3.54	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-56KDA-ASSOCIATED PROTEIN.;
11484	24427	37978	3.54	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-56KDA-ASSOCIATED PROTEIN.;
11508	24448	37998	2.13	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
11509	20670	34037	1.92	0.0E+00	L32832.1	NT	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
11513	24454	38003	3.74	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
11513	24454	38004	3.74	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
11523	24464	38017	7.84	0.0E+00	AA195905.1	EST_HUMAN	zp95b11.r1 Stragene muscle 837209 Homo sapiens cDNA clone IMAGE:6276933 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
11531	24472	38023	1.51	0.0E+00	AW673469.1	EST_HUMAN	ba54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60275 O60275 KIAA0522 PROTEIN;
11531	24472	38024	1.51	0.0E+00	AW673469.1	EST_HUMAN	ba54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60275 O60275 KIAA0522 PROTEIN;
11549	24490	38046	5.23	0.0E+00	BF507876.1	EST_HUMAN	U1-H-B14-ak-b-10-0-U1.st NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
11549	24490	38047	5.23	0.0E+00	BF507876.1	EST_HUMAN	U1-H-B14-ak-b-10-0-U1.st NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
11558	24496	38052	3.54	0.0E+00	AU135170.1	EST_HUMAN	AU135170 PLACE1 Homo sapiens cDNA clone PLACE1001381 5'
11560	24500	38056	1.84	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11560	24500	38057	1.84	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11561	24501	38058	17.24	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_59 Homo sapiens cDNA clone IMAGE:3889207 5'
11561	24501	38059	17.24	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_59 Homo sapiens cDNA clone IMAGE:3889207 5'
11567	24507	38064	2.9	0.0E+00	D67882.1	NT	Human mRNA for KIAA0241 gene, partial cds

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11571	24510		5.42	0.0E+00	BF240536.1	EST_HUMAN	601875630F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4099710 5'
11582	24520	38075	1.68	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11582	24520	38076	1.68	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11586	24524	38079	3.41	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11586	24524	38080	3.41	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11590	24528	38085	2.06	0.0E+00	BE122764.1	EST_HUMAN	23_08 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 23_08 5' similar to Homo sapiens cyclin B2 (CCNB2)
11591	24529	38086	3.23	0.0E+00	BE017960.1	EST_HUMAN	b673h05.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3048057 5' similar to SW:CD97_HUMAN
11595	24533	38089	2.69	0.0E+00	AA772837.1	EST_HUMAN	P48990 LEUCOCYTE ANTIGEN CD97 PRECURSOR. [1];
11605	24543	38103	6.4	0.0E+00	4503544	NT	ae74g04.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:969942 3'
11612	24560	38110	2.25	0.0E+00	BF576287.1	EST_HUMAN	Homo sapiens eukaryotic translation Initiation factor 5A (EIF5A) mRNA
11615	24553	38114	5.5	0.0E+00	AW328173.1	EST_HUMAN	602134132F1 NIH_MGC_31 Homo sapiens cDNA clone IMAGE:4289502 5'
11620	24558		83.29	0.0E+00	M55083.1	NT	d04g05.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2847177 5'
11624	24582	38123	159.29	0.0E+00	AI660988.1	EST_HUMAN	Human gamma actin-like pseudogene, complete cds
11625	24563	38124	2.3	0.0E+00	BF306996.1	EST_HUMAN	wf20e11.x1 Soares Dieckgrafe_colon_NHUC Homo sapiens cDNA clone IMAGE:2351180 3' similar to gb:IM87789 IG GAMMA-1 CHAIN C REGION (HUMAN);
11625	24563	38125	2.3	0.0E+00	BF306996.1	EST_HUMAN	601899823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11632	24569	38133	59.51	0.0E+00	BF362462.1	EST_HUMAN	601899823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11648	24585	38154	2.42	0.0E+00	U36284.1	NT	QV2-NN0054-230800-333-q04 NN0054 Homo sapiens cDNA
11648	24585	38155	2.42	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11654	24591		4.74	0.0E+00	BE997051.1	EST_HUMAN	Human beta-prime-adaptin (BAM22) gene, exon 16
11665	24601	38177	1.54	0.0E+00	8923698	NT	601439605F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924577 5'
11668	24604		2.24	0.0E+00	BF207662.1	EST_HUMAN	Homo sapiens golgin-like protein (GLP), mRNA
11669	24605		4.82	0.0E+00	BE257744.1	EST_HUMAN	601861947F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081715 5'
11682	24648	38225	4.13	0.0E+00	BE206846.1	EST_HUMAN	601116705F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357384 5'
11682	24648	38226	4.13	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11684	24650	38228	3.8	0.0E+00	AW763028.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11689	24655		4.96	0.0E+00	AA568707.1	EST_HUMAN	QV0-C10225-101299-071-f08 C10225 Homo sapiens cDNA
11690	18451	31322	3.12	0.0E+00	AI934954.1	EST_HUMAN	nl42c08.s1 NCI CGAP_P14 Homo sapiens cDNA clone IMAGE:1043342 similar to gb:IM85178 ALPHA-ACTININ 1, CYTOSKELETAL ISOFORM (HUMAN);
11691	24656	38234	9.26	0.0E+00	AW327895.1	EST_HUMAN	wp06g08.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2464094 3'
							dr02b08.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2846919 5'

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11711	25706	38254	1.63	0.0E+00	AW292776.1	EST_HUMAN	U1-H-BW0-ajj-d-07-0-J1.s1 NCI CGAP Sub6 Homo sapiens cDNA clone IMAGE:2729509 3'
11718	23915	37432	2.09	0.0E+00	4758927	NT	Homo sapiens neuroxin III (NRXN3) mRNA
11724	24610	38186	2.43	0.0E+00	BE965909.2	EST_HUMAN	601659083R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895916 3'
11724	24610	38187	2.43	0.0E+00	BE965909.2	EST_HUMAN	601659088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895916 3'
11725	24611	38188	3.67	0.0E+00	BE185656.1	EST_HUMAN	IL5-H10731-020500-077-05 HT0731 Homo sapiens cDNA
11739	24624	38202	5.4	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
11739	24624	38203	5.4	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
11746	24631	38211	2.29	0.0E+00	BF082504.1	EST_HUMAN	MR4-BT0358-130600-016-a04 B T0358 Homo sapiens cDNA
							wn83g03.x1 NCI CGAP_U11 Homo sapiens cDNA clone IMAGE:2452468 3' similar to gb:S37431 LAMININ RECEPTOR (HUMAN);
11750	24635	38214	19.22	0.0E+00	AI923116.1	EST_HUMAN	ncz11c07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686
11753	24681	38259	8.71	0.0E+00	AA760913.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN. ;
							ncz11c07.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686
11753	24681	38260	8.71	0.0E+00	AA760913.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN. ;
11758	24686	38266	3.51	0.0E+00	BE910546.1	EST_HUMAN	601501090F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902926 5'
							712712.x1 NCI CGAP_CLL 1 Homo sapiens cDNA clone IMAGE:3295919 3' similar to TR:O00409 O00409 CHECKPOINT SUPPRESSOR 1. ;
11766	23921	37440	5.45	0.0E+00	BE676347.1	EST_HUMAN	601279336F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11769	23924	37443	2.02	0.0E+00	BE615666.1	EST_HUMAN	601279336F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11769	23924	37444	2.02	0.0E+00	BE615666.1	EST_HUMAN	601279336F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11777	23932	37453	2.13	0.0E+00	AV757420.1	EST_HUMAN	AV757420 BM Homo sapiens cDNA clone BMFAGH03 5'
11808	24693	38273	5.01	0.0E+00	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11808	24693	38274	5.01	0.0E+00	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11822	24705	38287	3.67	0.0E+00	AU138211.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE1008077 5'
11835	24718	38304	5.81	0.0E+00	BE622317.1	EST_HUMAN	601441096F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
11860	24742	38326	2.22	0.0E+00	AI839634.1	EST_HUMAN	hm94c10.x5 NCI CGAP_Brr25 Homo sapiens cDNA clone IMAGE:2165778 3'
11868	24750	38332	14.23	0.0E+00	BE748999.1	EST_HUMAN	601572186T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3839012 3'
11868	24750	38333	14.23	0.0E+00	BE748999.1	EST_HUMAN	601572186T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3839012 3'
11877	24759	38343	2.54	0.0E+00	AU141882.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
11877	24759	38344	2.54	0.0E+00	AU141882.1	EST_HUMAN	AU141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
							w291h01.x1 NCI CGAP_Brr25 Homo sapiens cDNA clone IMAGE:2566225 3' similar to WP:F53H10.2 CEI1040 ZINC FINGER, C2H2 TYPE ;
11880	24762	38347	1.97	0.0E+00	AW006022.1	EST_HUMAN	7122b10.x1 NCI CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3316699 3' similar to TR:Q13458 Q13458 TRIO ;
11882	25707	38349	2.38	0.0E+00	BF002333.1	EST_HUMAN	DKFZp434L1227_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L1227 5'
11899	24780	38366	1.48	0.0E+00	AL043705.1	EST_HUMAN	DKFZp434L1227_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L1227 5'

Page 543 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11899	24780	36367	1.48	0.0E+00	AL043705.1	EST_HUMAN	DKFZp434L1227.1 434 (synonym: hicc3) Homo sapiens cDNA clone DKFZp434L1227 5'
11904	24785	36374	3.36	0.0E+00	AW367776.1	EST_HUMAN	MR4-ST0118-261099-012-503 ST0118 Homo sapiens cDNA
11904	24785	36375	3.36	0.0E+00	AW367776.1	EST_HUMAN	MR4-ST0118-261099-012-503 ST0118 Homo sapiens cDNA
11916	24797		2.43	0.0E+00	AW863777.1	EST_HUMAN	MR3-SN0010-310300-107-h03 SN0010 Homo sapiens cDNA
11927	24808	38402	4.22	0.0E+00		NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11927	24808	38403	4.22	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11932	24813	38409	5.01	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
11934	24816	38411	2.03	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11934	24816	38412	2.03	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11946	20655	34019	2.41	0.0E+00	AA211663.1	EST_HUMAN	zn66102.1 3' UTR gene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb:X03740
11947	24826	38421	2.36	0.0E+00	AA488894.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
11952	24831	38427	2.35	0.0E+00	BE794758.1	EST_HUMAN	aa56g11.1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:324900 3' similar to gb:M37766 B-
11953	24832	38428	160.92	0.0E+00	BE879633.1	EST_HUMAN	LYMPHOCYTE ACTIVATION MARKER BLAST-1 PRECURSOR (HUMAN);
11955	24844	38439	12.55	0.0E+00	BE409963.1	EST_HUMAN	601590588F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944708 5'
11956	24845	38440	2.25	0.0E+00	AF223391.1	NT	601491821F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3894220 5'
11966	24845	38441	2.25	0.0E+00	AF223391.1	NT	601299403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3829544 5'
11967	18647	31589	2.21	0.0E+00	D26535.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11967	18647	31590	2.21	0.0E+00	D26535.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11968	24846	38442	4.01	0.0E+00	BF681641.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11968	24846	38443	4.01	0.0E+00	BF681641.1	EST_HUMAN	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11974	18348	31294	1.51	0.0E+00	AF272663.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11976	24853	38451	1.57	0.0E+00	AU132940.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
11979	24856	38453	4.83	0.0E+00	BE903372.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
11982	24869	38464	3.47	0.0E+00	BF312552.1	EST_HUMAN	Homo sapiens gephyrin mRNA, complete cds
11982	24869	38465	3.47	0.0E+00	BF312552.1	EST_HUMAN	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11984	24871	38467	34.13	0.0E+00	X51755.1	NT	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
11984	24871	38468	34.13	0.0E+00	X51755.1	NT	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
12006	24883		3.04	0.0E+00	BE906402.1	EST_HUMAN	Human lambda-immunoglobulin constant region complex (germline)
12007	24884	38479	1.52	0.0E+00	BE892690.1	EST_HUMAN	Human lambda-immunoglobulin constant region complex (germline)
12035	25708		56.85	0.0E+00	BF309120.1	EST_HUMAN	Human lambda-immunoglobulin constant region complex (germline)

Table 4

Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12037	24912	38505	2.38	0.0E+00	BE698861.1	EST_HUMAN	RC4-NN0025-120600-016-b07 NN0025 Homo sapiens cDNA
12037	24912	38506	2.38	0.0E+00	BE698861.1	EST_HUMAN	RC4-NN0025-120600-016-b07 NN0025 Homo sapiens cDNA
12040	24915	38509	60.15	0.0E+00	BE297175.1	EST_HUMAN	601177407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532068 5'
12048	24921	38517	1.81	0.0E+00	BE744311.1	EST_HUMAN	601576525F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3837222 5'
12048	24921	38518	1.81	0.0E+00	BE744311.1	EST_HUMAN	601576525F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3837222 5'
12062	24935	38531	1.81	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
12062	24935	38532	1.81	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
12067	24940	38535	1.68	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
12071	24944	38537	2.41	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #936215. Homo sapiens cDNA clone
12071	24944	38538	2.41	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #936215. Homo sapiens cDNA clone
12077	24949	38544	6.46	0.0E+00	BE545535.1	EST_HUMAN	601070391F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456407 5'
12080	24952	38547	3.24	0.0E+00	AU117974.1	EST_HUMAN	AU117974 HEMBA1 Homo sapiens cDNA clone HEMBA1002812 5'
12080	24952	38548	3.24	0.0E+00	AU117974.1	EST_HUMAN	AU117974 HEMBA1 Homo sapiens cDNA clone HEMBA1002812 5'
12118	24968	38590	2.15	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
12124	24983	38595	2.27	0.0E+00	BE264998.1	EST_HUMAN	601193827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537774 5'
12124	24993	38596	2.27	0.0E+00	BE264998.1	EST_HUMAN	601193827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537774 5'
12131	25000	38605	6.45	0.0E+00	11419020	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon (NFKBIE), mRNA
12131	25000	38606	6.45	0.0E+00	11419020	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon (NFKBIE), mRNA
12146	25072	31299	1.81	0.0E+00	BE312542.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
12161	25819		1.43	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12163	25828		6.62	0.0E+00	AI190393.1	EST_HUMAN	qel7b12.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1739231 3'
12173	25022		1.33	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
12192	25037		2.28	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12201	25044		5.82	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
12218	25056		3.47	0.0E+00	5802973	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12251	25788	31523	2.06	0.0E+00	AF240796.1	NT	
12265	25798		4.42	0.0E+00	AL041931.1	EST_HUMAN	DKFZp434K0819_r1 434 (synonym: hles3) Homo sapiens cDNA clone DKFZp434K0819 5'
12291	25940		3.76	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
12299	25110		5.96	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218_r1 434 (synonym: hles3) Homo sapiens cDNA clone DKFZp434G218 5'

Table 4

Single Exon Probes Expressed In Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12314	25934		1.98	0.0E+00	AI903497.1	EST_HUMAN	IL-BT030-271098-001 BT030 Homo sapiens cDNA
12357	25962		1.82	0.0E+00	N54484.1	EST_HUMAN	yy40e08.a1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW:POL_BAEVMP10272 POL POLYPROTEIN ;
12371	25157		5.99	0.0E+00	AF106666.1	NT	Homo sapiens adenylosuccinate lyase gene, complete cds
12374	13900	28857	3.44	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
12374	13900	28858	3.44	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
12383	25837		2.56	0.0E+00	10092587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
12411	13820		2.52	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
12504	25767	31521	3.54	0.0E+00	AW590082.1	EST_HUMAN	hg31e06.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2947234 3' similar to contains Alu repetitive element contains element MER22 repetitive element ;
12534	25797		1.41	0.0E+00	L20493.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
12561	25831		2.82	0.0E+00	AF088757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12597	25900		2.72	0.0E+00	9835487	NT	Human endogenous retrovirus, complete genome
12635	25823		1.47	0.0E+00	AI204914.1	EST_HUMAN	an05h04.x1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
12683	15027	28034	1.88	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12683	15027	28035	1.88	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12701	25361	31767	1.52	0.0E+00	AF036385.1	NT	Homo sapiens caveolin-3 (CAV3) mRNA, complete cds
12712	14723	27705	4.49	0.0E+00	H30132.1	EST_HUMAN	yo59e08.r1 Soares breast 3NbhBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSPPEPTIDASE 5 PRECURSOR (HUMAN);
12712	14723	27706	4.49	0.0E+00	H30132.1	EST_HUMAN	yo59e08.r1 Soares breast 3NbhBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSPPEPTIDASE 5 PRECURSOR (HUMAN);
12724	25377		52.99	0.0E+00	D50859.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
12725	25378	31743	3.83	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12725	25378	31744	3.83	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12739	15120	28141	2.42	0.0E+00	4788489	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
12780	25415		1.39	0.0E+00	AW684998.1	EST_HUMAN	hi86e06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978154 3'
12818	25440	31721	1.51	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
12827	25446		1.55	0.0E+00	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12849	18338	31287	3.07	0.0E+00	4885312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
12858	18346	31292	1.88	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12863	25466		2.17	0.0E+00	AB028900.1	NT	Homo sapiens CST gene for cerebroside sulfoltransferase, exon 1, 2, 3, 4, 5

Page 546 of 546
Table 4
Single Exon Probes Expressed in Bone Marrow

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12902	25486	31733	2.53	0.0E+00	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
12927	25984		3.32	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12935	13692	26609	2.65	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12986	14499	27473	1.32	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
13018	25568		3.02	0.0E+00	7657020	NT	Homo sapiens DKFZP434P211 protein (DKFZP434P211), mRNA
13051	25590	31685	1.36	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
13082	25613		1.63	0.0E+00	X67147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
13103	14203	27156	1.4	0.0E+00	986844	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA

1/10

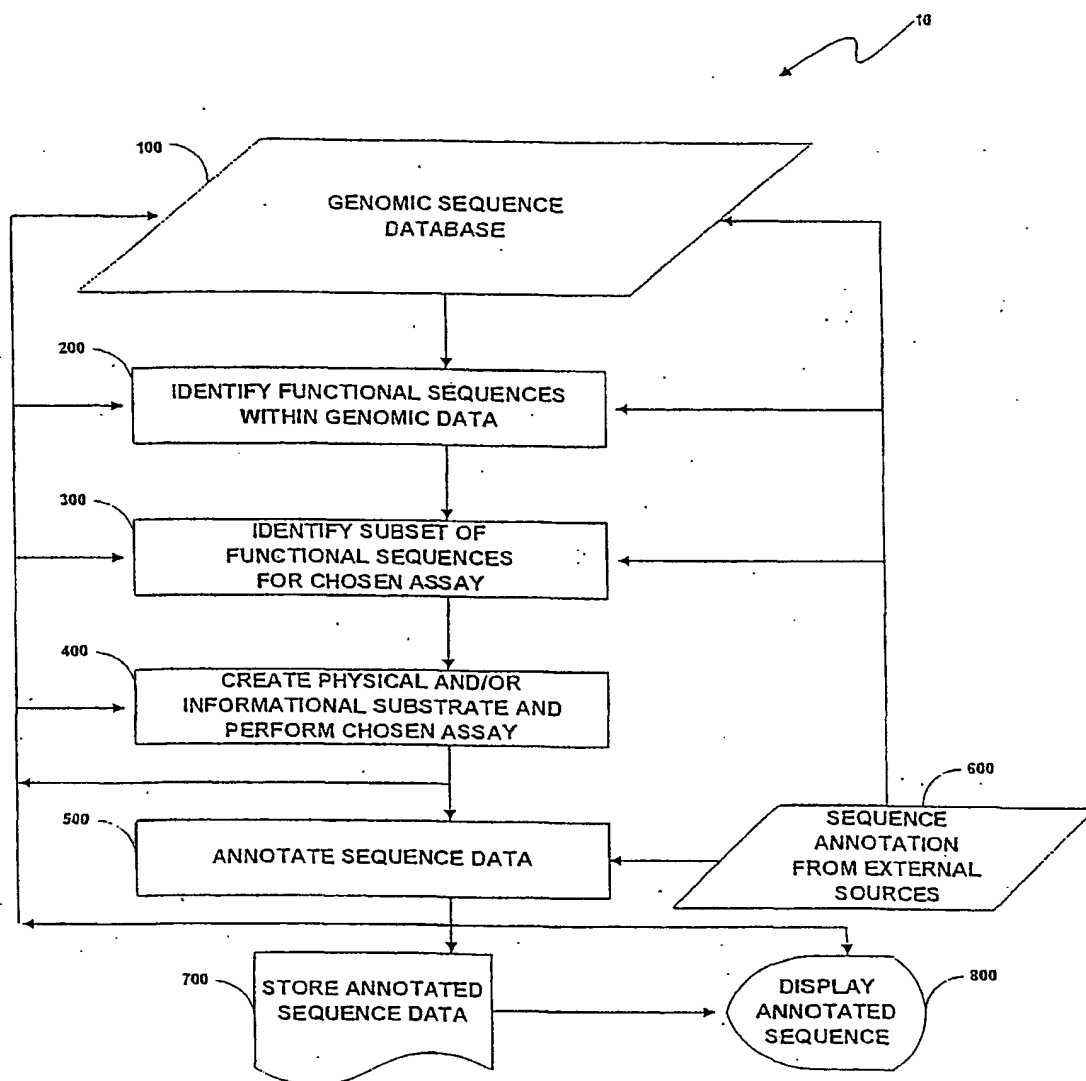


Fig. 1

2/10

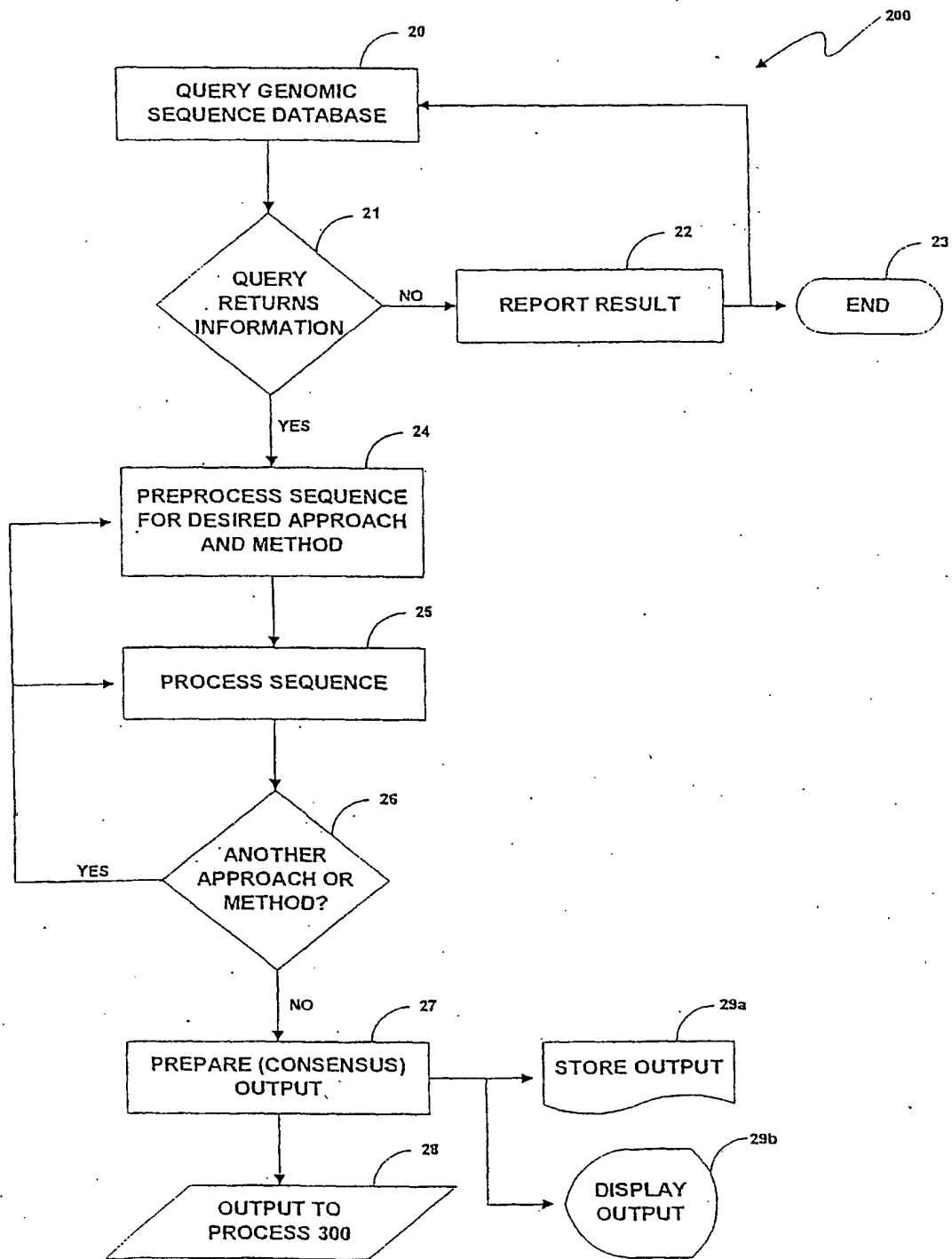


Fig. 2

3/10

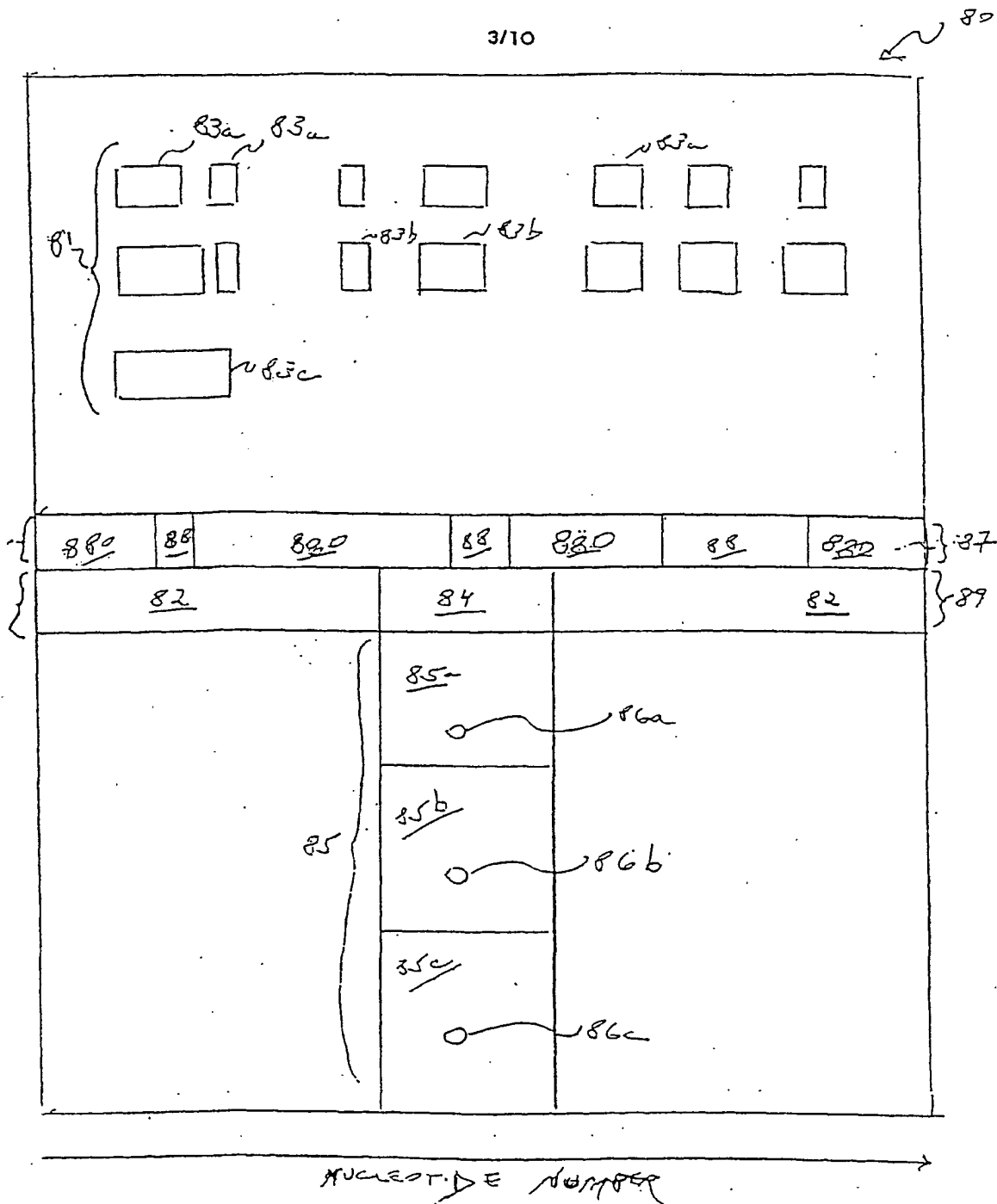


Fig. 3

4/10

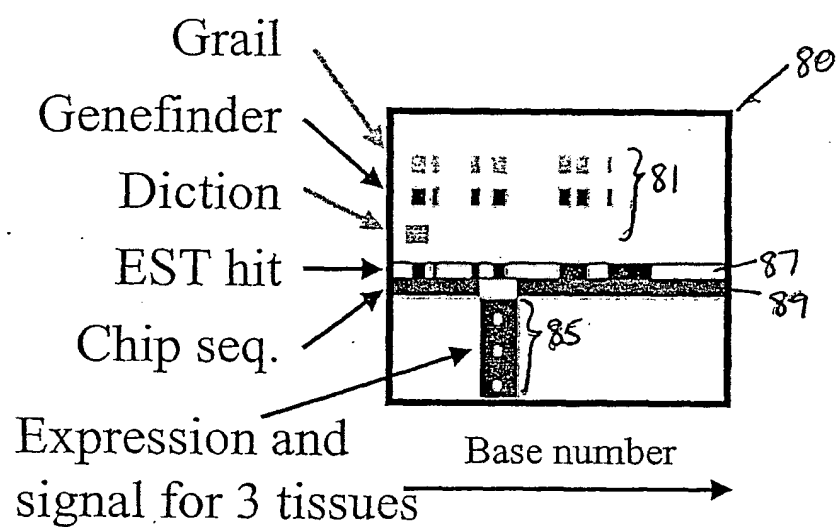


Fig. 4

5/10

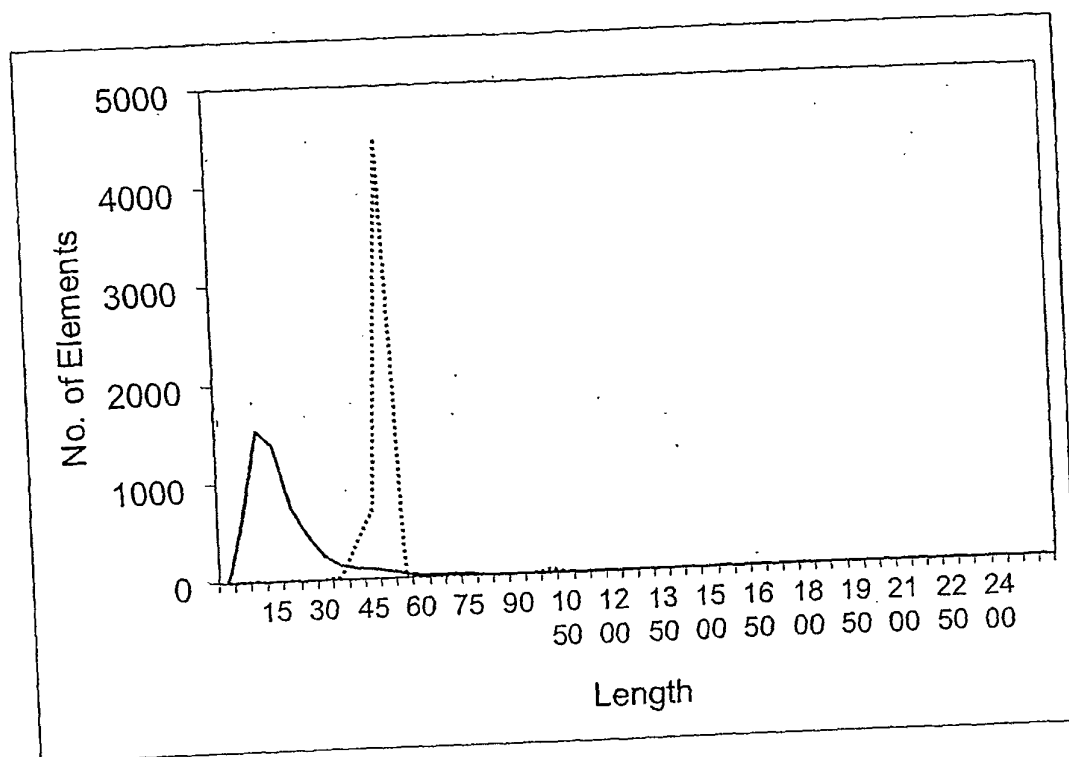


Fig. 5

6/10

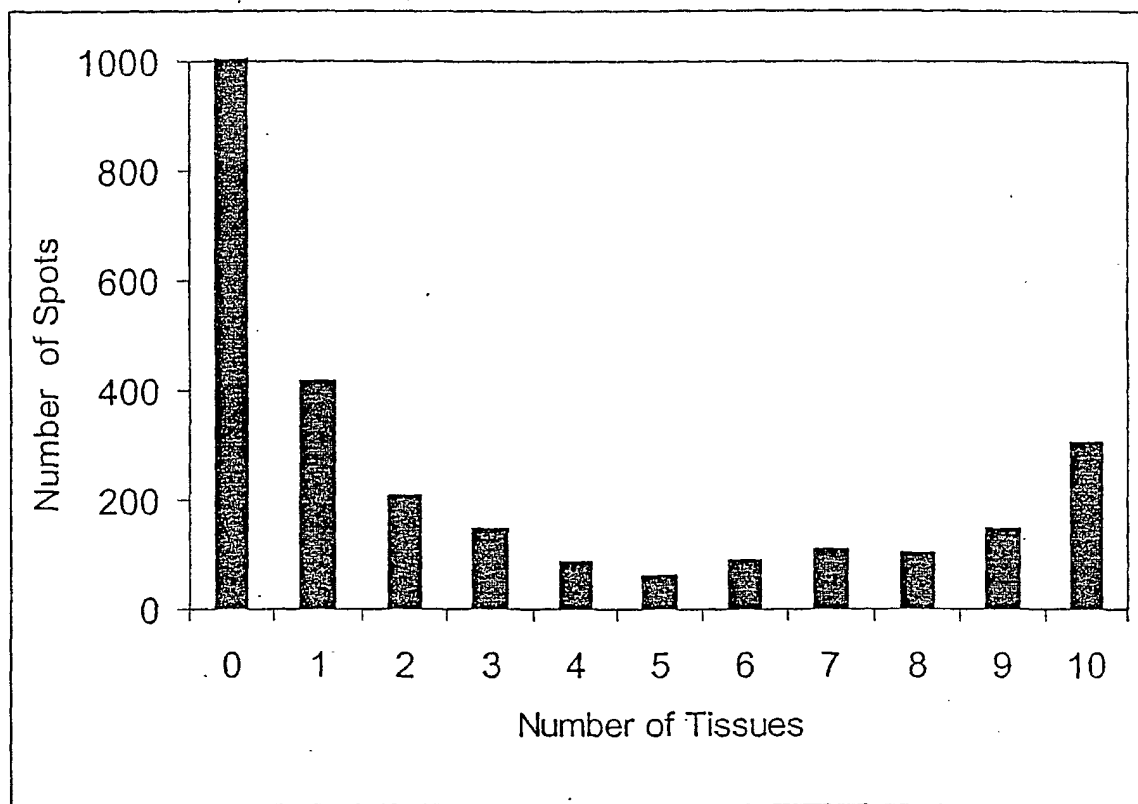
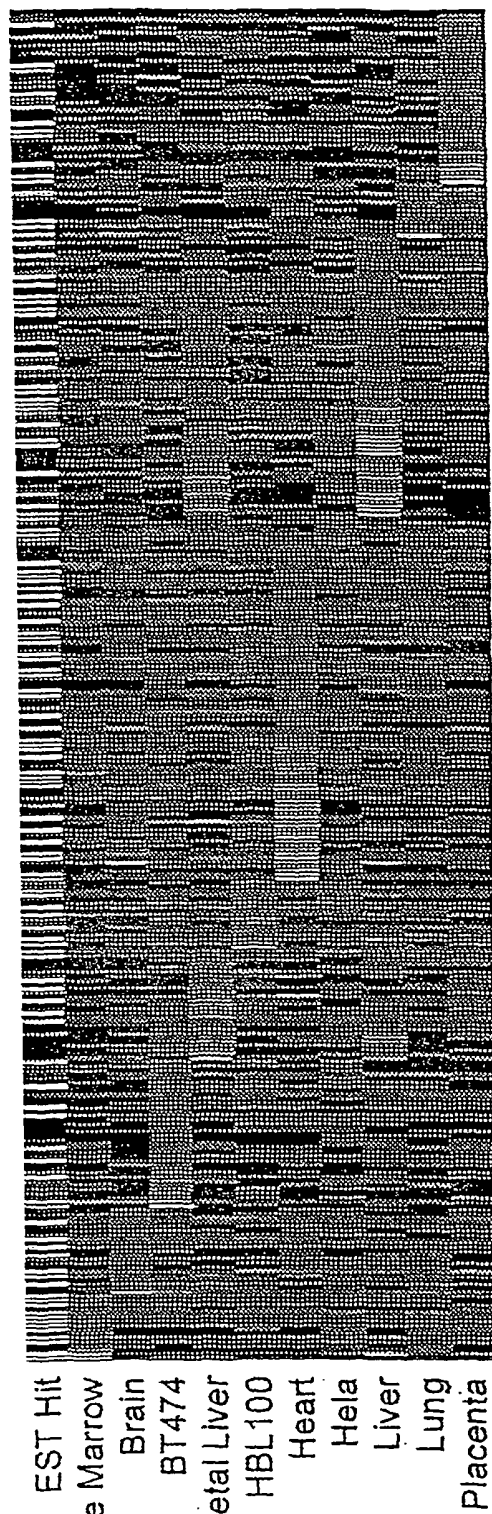


Fig. 6

7/10



EST Hit
Bone Marrow
Brain
BT474
Fetal Liver
HBL100
Heart
Hela
Liver
Lung
Placenta

Fig. 7a

ratio legend

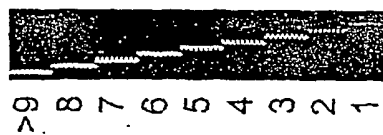


Fig. 7b

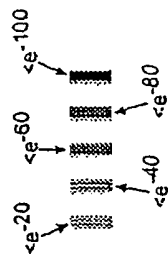


Fig. 7c

8/10

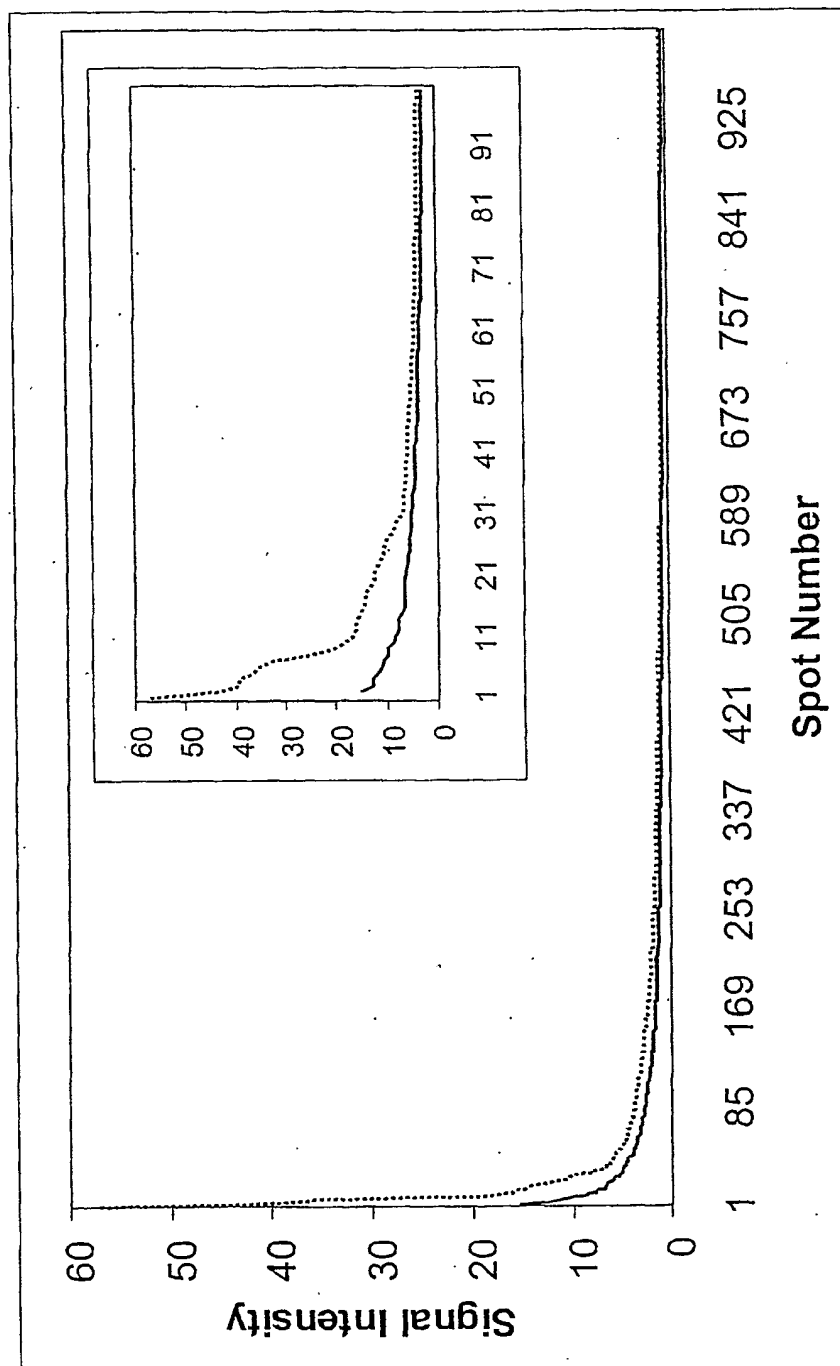


Fig. 8

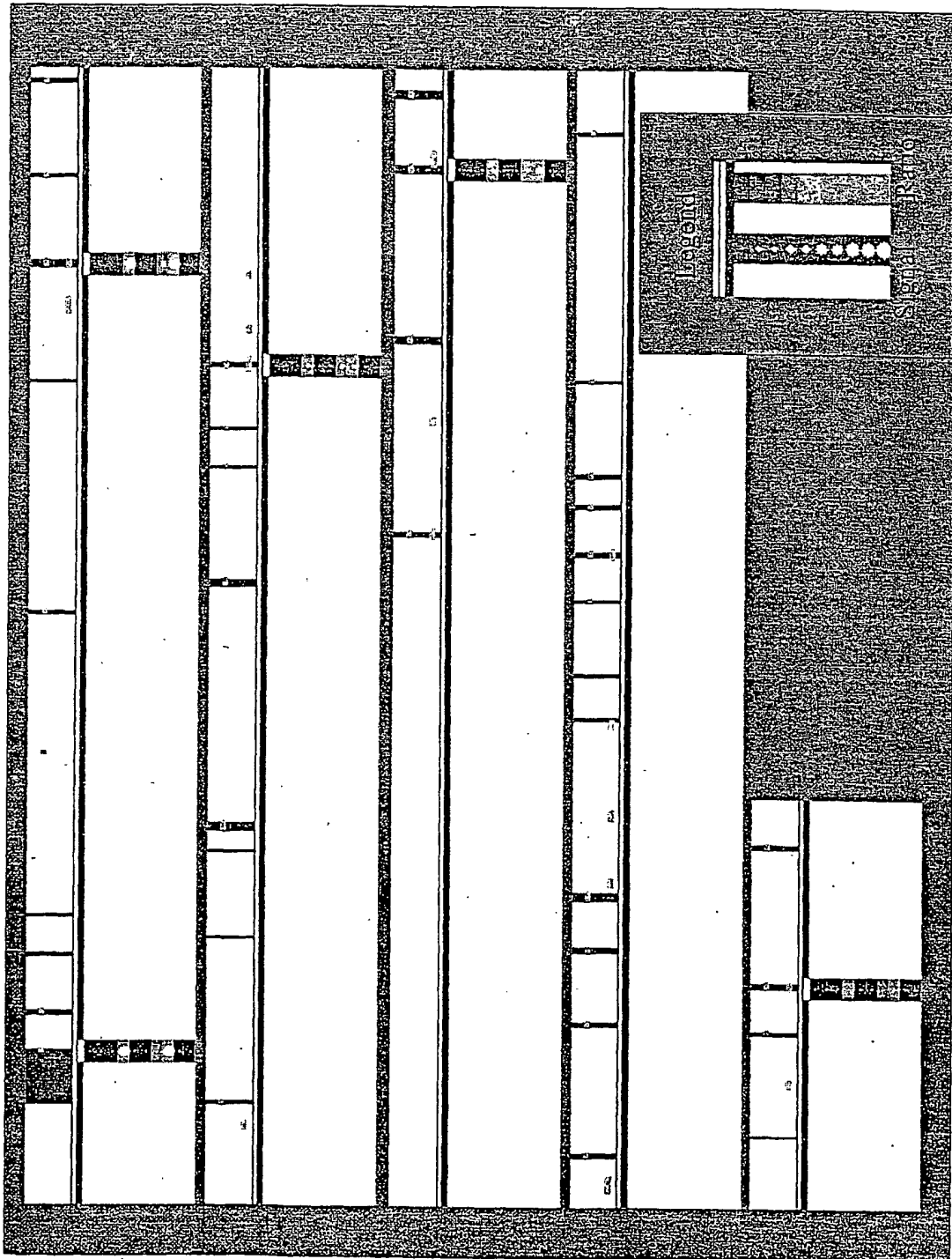


Fig. 9

10/10

Fig. 10

